# I-215/University Parkway Interchange Improvement Project

CITY OF SAN BERNARDINO
SAN BERNARDINO COUNTY, CALIFORNIA
District 08-SBd-215 PM11.35/11.95
EA: 08-0E420
PN: 0800000083

## Initial Study with Proposed Negative Declaration


**Prepared by the**
**State of California Department of Transportation**

**July 2019**

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## General Information about This Document

### What's in this Document:

The San Bernardino County Transportation Authority (SBCTA) in cooperation with the City of San Bernardino (City), and the California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study (IS) with proposed Negative Declaration (ND), which examines the potential environmental impacts of the alternatives being considered for the proposed Interstate 215 (I-215)/University Parkway Interchange Improvement Project (Project) located in the City of San Bernardino, San Bernardino County, California. Caltrans is the lead agency under California Environmental Quality Act (CEQA) and the lead agency under the National Environmental Policy Act (NEPA). The document tells you why the Project is being proposed, what alternatives we have considered for the Project, how the existing environment could be affected by the Project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

**What you should do:**

- Please read the document.
- Additional copies of it, as well as of the technical studies we relied on in preparing it, are available for review at Caltrans District 8, 464 West 4th Street, San Bernardino, CA 92401, and additional locations listed below.
    - San Bernardino County Transportation Authority (SBCTA), 1170 W. 3rd Street, Floor 2, San Bernardino, CA 92410
    - City of San Bernardino, Department of Public Works, 300 N. "D" Street, San Bernardino, CA 92418
    - California State University San Bernardino, John M. Pfau Library, 5500 University Parkway, San Bernardino, CA

  The document may be downloaded at the following website: http://gosbcta.com/plans-projects/projects-interchanges-i215university.html
- Attend the public hearing Thursday, July 25th, 2019 at the San Bernardino Inn and Suites, 2000 Ostrems Way, San Bernardino, California 92407.
- We'd like to hear what you think. If you have any comments regarding the proposed project, please attend the public meeting, and/or send your written comments to Caltrans by the deadline, August 12, 2019.
- Submit comments via postal mail to:

  Antonia Toledo, Senior Environmental Planner, Environmental Studies Branch D
  California Department of Transportation, Environmental Planning (MS #820)
  464 West 4th Street, San Bernardino, CA 92401
- Submit comments via email to: D8.0E420.Comments@dot.ca.gov .
- Be sure to submit comments by the deadline: August 12, 2019**.**

## What happens Next:

After comments are received from the public and reviewing agencies, Caltrans, may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to the Department of Transportation, Attn: Tim Watkins, 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA 92410-1715; (909) 884-8276. Voice or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.

SCH # _____
215-PM 11.35/11.95
EA 0E4200
Project No. 0800000083

Interstate 215 (I-215)/University Parkway Interchange Improvement Project
I-215 from Postmile 11.35 to Postmile 11.95 and University Parkway from North Varsity Street to Hallmark Parkway, in the City of San Bernardino, San Bernardino County, CA

# Draft Initial Study with Proposed Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C), 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA
Department of Transportation

and

San Bernardino County Transportation Authority

Cooperating Agencies: City of San Bernardino
Responsible Agencies: California Department of Transportation, San Bernardino County Transportation Authority

7/10/19
Date of Approval

David Bricker
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

The following persons may be contacted for more information about this document:

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# PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

## *Project Description*

The San Bernardino County Transportation Authority (SBCTA), in cooperation with the California Department of Transportation (Caltrans) and the City of San Bernardino (City), proposes to improve the existing Interstate 215 (I-215)/University Parkway Interchange configuration to provide operational improvements to traffic flow in the City of San Bernardino, California. The I-215/University Parkway Interchange Improvement Project (Project) will replace the existing University Parkway tight diamond interchange configuration with a Diverging Diamond Interchange (DDI) configuration. The purpose of the Project is to accommodate the projected regional population growth, California State University, San Bernardino (CSUSB) enrollment increases, and increased traffic demands at the existing I-215/University Parkway Interchange.

Improvements would occur within areas of previously disturbed soils located in the general vicinity of the existing I-215/University Parkway interchange. No building structures would be disturbed as part of the proposed Project, including the existing University Parkway undercrossing and I-215 bridge structure. Right-of-way (ROW) requirements would potentially include partial acquisitions and temporary construction easements (TCE). Although no property relocations are anticipated as part of the proposed Project, changes to vehicular access at two areas (Scottish Rite Property and Retail Plaza) along University Parkway are anticipated. Additional improvements may include the provision of street lighting, traffic signal modifications, minor paving, minor utility relocations, signage changes, re-striping, turn lanes, bicycle, pedestrian, and median streetscape improvements. Temporary construction-related signage and temporary delineation for traffic lanes are also expected to occur.

### *Determination*

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an ND for this Project. This does not mean that Caltrans' decision regarding the Project is final. This ND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study (IS) for the proposed Project; and pending public review, expects to determine from this study that the proposed Project would not have a significant impact on the environment for the following reasons:

The proposed Project would have no impacts on Agricultural and Forest Resources, Cultural Resources, Energy, Land Use and Planning, Mineral Resources, Population and Housing, Recreation, and Tribal Cultural Resources.

In addition, the proposed Project would have less than significant impacts on Aesthetics, Air Quality, Biological Resources, Greehouse Gas Emissions, Hazards and Hazardous Materials,

Hydrology and Water Quality, Noise, Public Services, Transportation, Utilities and Service Systems, and Wildfire.

**Standard Environmental Commitment, Avoidance, and Minimization Measures:**

The following standard environmental commitment, avoidance, and minimization measures will be implemented as a part of the proposed Project. With the incorporation of the following standard environmental commitments, avoidance, and minimization measures the proposed Project would not have a significant impact on the environment.

**VIS-1** **Lighting Plan.** Lighting fixtures will be selected and installed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with non-glare hoods and focused within the Project ROW. The lighting plan will be reviewed and approved by the City of San Bernardino's Resident Engineer and Caltrans District 8 Landscape Architect prior to construction to ensure compliance with these criteria.

**VIS-2** **Landscape Plan.** A highway landscape plan will be prepared that identifies all opportunities to use areas within the state ROW for full landscaping consistent with the Caltrans Highway Design Manual. This will include landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new project structures, such as ramps and tunnels to the extent feasible. This plan will incorporate all applicable procedures and requirements detailed in the Caltrans Highway Design Manual, Section 902.1, Planting Guidelines (November 2001), and policies of the City of San Bernardino's General Plan and Municipal Code, as applicable.

During Final Design, the Caltrans District 8 Landscape Architect will verify that the design minimizes removal of existing mature trees. If removal of mature trees cannot be avoided, additional landscape improvements will be incorporated into the Final Design for these areas. The replacement ratio of any trees removed will be determined by the Caltrans District 8 Landscape Architect.

**VIS-3** **San Bernardino General Plan Urban Design Element.** During Final Design, the City of San Bernardino's Resident Engineer will verify that design elements are consistent with the vision for the City regarding aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage.

**VIS-4** **University District Specific Plan.** During Final Design, the City of San Bernardino's Resident Engineer will verify that design elements are consistent with the vision for the University District Specific Plan regarding gateways, aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage.

**VIS-5** **Conceptual Plan.** During Final Design, a conceptual plan will be utilized and coordinated among the City of San Bernardino, SBCTA, and Caltrans District Landscape Architect to ensure consistency with the I-215 San Bernardino Master Plan guidelines, San Bernardino General Plan Urban Design Element, and the University District Specific Plan.

**AQ-1** **South Coast Air Quality Management District Rule 403.** During clearing, grading, earthmoving, and excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in the Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.

**AQ-2** **Ozone Precursor Emissions Control.** Project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications

**AQ-3** **State Vehicle Code Requirements.** During construction, all trucks that are used to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

**AQ-4** **Caltrans Standard Specifications for Construction Section 14-9-02.** During construction, the contractor will adhere to the Caltrans Standard Specifications for Construction (Section 14.9). Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

**AQ-5** **Fugitive Dust Emissions - Dust.** Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

**AQ-6** **Soil Binding Elements.** Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.

**AQ-7** **Fugitive Dust Emissions – Truck Washing.** Trucks will be washed as they leave the ROW, as necessary to control fugitive dust emissions.

**AQ-8** **California Code of Regulations Title 17, Section 93114.** Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by California Code of Regulations (CCR) Title 17, Section 93114.

**AQ-9** **Dust Control Plan.** A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.

**AQ-10** **Equipment and Storage Site Requirements.** Equipment and material storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

**BIO-1** **Nesting Birds.** To avoid impacts to nesting birds, any native vegetation removal or tree (native or exotic) trimming activities will occur outside of the nesting bird season. In the event that vegetation clearing is necessary during the nesting season (i.e., February 15–August 31), a contractor supplied, qualified biologist will conduct a pre-construction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer should be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active.

**BIO-2** **Environmental Sensitive Areas.** Non-impacted California Buckwheat Scrub (CBS) and CBS (Disturbed) habitat that is outside the Project limits will be identified as an Environmental Sensitive Area (ESA). Prior to construction, exclusionary fencing will be installed around all ESAs, under supervision of a biologist familiar with the biological resources in the Biological Study Area (BSA), to prevent accidental encroachment into these areas.

**BIO-3** **Weed Abatement.** A weed abatement program will be developed and implemented by SBCTA in order to minimize the importation of non-native plant material during and after construction. Eradication strategies will be employed should an invasion occur.

**BIO-4** **Fire Season.** When work is conducted during the fire season (as identified by the San Bernardino County Fire Authority) adjacent to any vegetation, appropriate firefighting equipment (e.g., extinguishers, shovels, and water tankers) will be available on site during all phases of Project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise the construction contractors regarding fire risk from all construction-related activities.

**BIO–5** **California Gnatcatcher Breeding Season.** Should construction be initiated during the coastal California Gnatcatcher (CAGN) breeding season (February 15–August 31), 3 separate days of preconstruction nesting surveys will be conducted within 7 days of construction. Should breeding CAGN be identified within 500 feet of the Project, Project activities will not be allowed within 500 feet of the active nest, and additional noise measures will be implemented, as needed, to maintain noise levels of less than 60 A-weighted decibel (dBA) equivalent noise level (Leq) at the nest location. Section 7 consultation will be initiated with the United States Fish and Wildlife Service (USFWS) prior to conducting project activities within 500 feet of the active nest.

**BIO–6** **Burrowing Owl Preconstruction Survey.** A preconstruction survey for Burrowing Owl (BUOW) will be conducted by a contractor supplied, qualified biologist within 30-days prior to vegetation clearing/grading. If BUOW are found within 200 meters

of Project limits during the preconstruction survey, the biologist will determine appropriate measures necessary to ensure there is no take of active BUOW nests and California Department of Fish and Wildlife (CDFW) conservation requirements with regards to BUOW are met.

**BIO-7** **Burrowing Owl Preconstruction Survey Guidelines.** A qualified bat biologist familiar with crevice dwelling bat and bird species will survey I-215 over University Parkway Bridge in June, prior to construction, to assess the potential for the bridge's use for bat roosting, bat maternity roosting, and bird roosting/nesting because maternity roosts and nests are generally formed in the spring. The qualified bat biologist will also perform preconstruction surveys within 2 weeks prior to construction because bat and bird roosts can change seasonally. These surveys will include a combination of structure inspections, exit counts, and acoustic surveys.

**BIO-8** **Bat Management Plan.** If a roost is detected, a bat management plan will be prepared if it is determined that Project activities would result in impacts to roosting bats. The bat management plan will be submitted for CDFW approval prior to implementation and will include appropriate avoidance and minimization efforts such as:

- **Daytime Work Hours.** All work conducted under the I-215 bridge will occur during the day. If this is not feasible, lighting and noise will be directed away from night roosting and foraging areas.

- **Reduced use of Combustion Equipment.** Construction personnel will avoid parking construction-related combustion equipment (such as generators, pumps, and vehicles) under the I-215 bridge to the fullest extent possible. Construction activities will avoid severely restricting airspace access to the roosts.

- **Temporary Exclusion.** If recommended by the qualified bat biologist, to avoid indirect disturbance of bats and birds while roosting in areas that would be adjacent to construction activities, any portion of the structure that is deemed by a qualified bat biologist to have potential bat or bird roosting habitat and may be affected by the proposed Project will have temporary bat and bird eviction and exclusion devices installed under the supervision of a qualified and permitted bat biologist prior to the initiation of construction activities. Eviction and subsequent exclusion will be conducted during the fall (September or October) to avoid trapping flightless young bats inside during the summer months or hibernating/overwintering individuals during the winter. Such exclusion efforts are dependent on weather conditions, take a minimum of 2 weeks to implement, and must be continued to keep the structures free of bats and birds until the completion of construction. All eviction and/or exclusion techniques will be coordinated between the qualified bat biologist and the appropriate resource agencies (e.g., CDFW) if the structure is occupied by bats.

**BIO–9** **Nest Removal.** In order to avoid impacts to bridge- and crevice-nesting birds (i.e., swifts and swallows), all work on existing bridges with potential habitat that is conducted between February 15 and August 31 will include the removal of all bird

nests prior to February 1 of that year to construction under the guidance and observation of a contractor supplied, qualified biologist. Removal of swallow nests that are under construction will be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by a contractor supplied, qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or the completion of construction. All nest exclusion techniques will be coordinated between the Caltrans District Biologist, CDFW, and USFWS, if applicable.

**CUL-1** **Discovery of Buried Cultural Resources.** If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work will stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find. If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

**CUL-2** **Discovery of Human Remains.** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the "most likely descendent" (MLD). At this time, the person who discovered the remains will contact the Caltrans and/or SBCTA so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

**PAL-1** **Environmental Awareness Training.** Prior to the start of construction, SBCTA will ensure all field personnel be briefed regarding the types of fossils that could be found in the Project limits and the procedures to follow should paleontological resources be encountered. This training should be accomplished at the pre-grade kick-off meeting or morning tailboard meeting and should be conducted by the Project paleontologist or his/her representative. Specifically, the training should provide a description of the fossil resources that may be encountered in the Project limits, outline steps to follow in the event that a fossil discovery is made, and provide contact information for the Project paleontologist and on-site monitor(s). The training should be developed by the Project paleontologist and may be conducted concurrently with other environmental training (e.g., cultural and natural resources awareness training, safety training, etc.).

**PAL-2** **Paleontological Mitigation Monitoring.** Prior to the commencement of ground-disturbing activities, SBCTA will ensure that a qualified professional paleontologist be retained to prepare and implement a paleontological monitoring plan for the Project. Part-time monitoring is recommended for grading and excavation activities at depths greater than 5 feet bgs that will disturb previously undisturbed Quaternary Alluvium (Qya). Due to soil development, previous anthropogenic developments, and young age of surficial soil and native Quaternary surficial sediments, monitoring should not be required in Project limits where construction activities disturb sediments at depths less than 5 feet bgs.

Monitoring should entail the visual inspection of excavated or graded areas and trench sidewalls.

- In the event that an inadvertent fossil discovery is encountered during construction, all work will cease within a 20-foot radius of the discovery. On-site personnel will contact the construction superintendent and the Caltrans Paleontological Resources Specialist (PRS) immediately.

- In the event that an inadvertent fossil discovery is encountered during construction, SBCTA will ensure that the Caltrans PRS will examine the discovery to assess it for scientific significance and determine if any paleontological resources mitigation is warranted, including monitoring, preservation in place, excavation, documentation, curation, or other appropriate measures.

- In the event that an inadvertent fossil discovery is encountered during construction, and if the Caltrans PRS determines the find is scientifically significant and mitigation is warranted, SBCTA will ensure that a qualified professional paleontologist be retained. Steps will be taken to protect against looting, erosion, or other human or natural damage while the fossil locality is exposed.

**PAL-3** **Fossil Preparation, Curation, and Reporting.** Upon completion of fieldwork, all significant fossils collected should be prepared in a properly equipped paleontology laboratory to a point ready for curation. Preparation will include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Following laboratory work, all fossils specimens should be identified to the lowest taxonomic level, cataloged, analyzed, and delivered to the Natural History Museum of Los Angeles County for permanent curation and storage. The cost of curation is assessed by the repository and is the responsibility of SBCTA.

At the conclusion of laboratory work and museum curation, a final paleontological mitigation report should be prepared describing the results of the paleontological mitigation monitoring efforts associated with the Project. The report should include a summary of the field and laboratory methods, an overview of the Project limits geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, a copy of the report should also be submitted to the Natural History Museum of Los Angeles County.

**GHG-1** **Truck Idling.** During construction, SBCTA will ensure that idling will be limited to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

**GHG-2** **Truck Trips.** During construction, SBCTA will ensure that truck trips are scheduled outside of peak morning and evening commute hours.

**GHG-3** **Recycled Materials.** During construction, SBCTA will ensure that construction waste is minimized and the use of recycled materials maximized; which reduces consumption of raw materials, reduces landfill waste, and encourages cost savings.

**GHG-4** **Potable Water.** During construction, SBCTA will ensure that measures to reduce consumption of potable water will be incorporated.

**GHG-5** **On-Site Recycled Materials.** During construction, SBCTA will ensure that on-site recycling of existing project features is encouraged, such as Metal Beam Guard Railing, light standards, sub-base granular material, or native material that meets Caltrans specifications for incorporation into new work.

**GHG-6** **Limit Transport of Earthen Materials.** During construction, SBCTA will ensure that earthwork balance be implemented in order to reduce the need for transport of earthen materials by balancing cut and fill quantities.

**GHG-7** **Reduce Electric Lighting.** During construction, SBCTA will ensure that the need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights is reduced.

**GHG-8** **Improve Energy Efficiency.** SBCTA will ensure that measures are incorporated to improve energy efficiency will be implemented as part of the Project.

**GHG-9** **Improve Water Efficiency.** SBCTA will ensure that measures to improve water efficiency (including but not limited to landscaping and building operations) will be implemented as part of the Project.

**GHG-10** **Complete Streets.** SBCTA will ensure that Complete Streets components are implemented as part of the Project.

**GHG-11** **Solar Powered Highway Facility Components.** SBCTA will ensure that installation of solar to supply power to highway facility components or buildings will be implemented as part of the Project.

**GHG-12** **Native Landscaping.** SBCTA will ensure that native plants and vegetation (replacing more vegetation than was removed) will be integrated into the project design to increase carbon sequestration.

**GHG-13** **Green Infrastructure.** SBCTA will ensure that green infrastructure (planted areas) instead of gray (concrete) storm water facilities, will be implemented as part of the Project.

**GHG-14** **Increased Life-Span Pavement Materials.** SBCTA will ensure the design and installation of long-life pavement structures to minimize life-cycle costs. Consider future climate conditions in decisions. For example, areas that are expected to experience increased temperatures and extreme heat days may have different pavement needs than areas expecting more frequent freezing temperatures.

**HAZ-1** **Caltrans Standard Specifications, Section 14 11.12.** During construction, SBCTA will ensure that sampling, analysis, removal, and disposal of any traffic striping and pavement materials will be done in accordance with Construction Program Procedure Bulletin 99-2 and the Caltrans Standard Specifications, Section 14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue and Section 36-4 Residue Containing Lead from Paint and Thermoplastic (2015), and be consistent with the requirements within Caltrans

Construction Manual, Chapter 7-107E Removing Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue (2017). Before disposal, the contractor is required to sample the removed material for proper waste classification. Yellow traffic stripe and pavement marking that is characterized as hazardous waste require disposal to a DTSC permitted Class I disposal facility.

**HAZ-2** **Construction Health and Safety Plan.** Prior to construction, SBCTA will ensure that a health and safety plan to guide all construction activities is developed. A certified industrial hygienist will prepare this plan based on evaluations of proposed construction activities, the potential hazards identified in this report, and any future assessment prepared for the Project. This plan would contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties. The plan would meet the requirements of 29 Code of Federal Regulations (CFR) 1910 and 1926 and all other applicable federal, state, and local regulations and requirements. The designated contractor would be responsible for preparing the health and safety plan before start of construction.

**HAZ-3** **Construction Contaminant Management Plan.** Prior to construction, SBCTA will ensure that a soils and groundwater contaminant management plan is developed. This plan will include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials in accordance with applicable federal, state, and local regulations and requirements. The designated contractor would be responsible for preparing the contaminant management plan before start of construction.

**HAZ-4** **Construction Contingency Plan.** Prior to construction, SBCTA will ensure that a Construction Contingency Plan with guidance provided in Chapter 7-107 of the Caltrans Construction Manual for handling and dealing with unknown hazards will be developed (Appendix I for Caltrans Unknown Hazards Procedure). This plan will include provisions for responding to events such as the discovery of unidentified UST, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address Underground Storage Tank (UST) decommissioning, field screening, and material testing methods; mitigation and contaminant management requirements; and health and safety requirements for construction workers. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified by calling 1-800-424-8802, and cleanup must be coordinated with environmental agencies. The designated contractor is responsible for preparing the construction contingency plan before start of construction.

**HAZ-5** **Lead Compliance Plan.** Prior to construction, SBCTA will ensure that a lead compliance plan is developed by a Certified Industrial Hygienist to protect workers from exposure to lead associated with yellow traffic stripe, pavement makings, and soil. The lead compliance plan will include procedures in the handling, management, sampling, and disposal of material containing yellow traffic stripe, pavement markings, and soil.

**HAZ-6** **National Pollution Discharge Elimination System Construction General Permit.** The National Pollution Discharge Elimination System (NPDES) Construction General Permit requires a construction site characterization, including a description of any pollution sources. Prior to construction, SBCTA will ensure that the designated contractor comply with the NPDES Construction General Permit by preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include Best Management Practices (BMP) to control the pollutants, such as sediment control, storm drain inlet protection, construction materials management, non-storm water BMPs, and provide pollution-source corrective measures. All work must conform to the construction site best management practice requirements specified in the latest edition of the *Storm Water Quality Handbooks: Construction Site Best Management Practices Manual* to control and minimize impacts of construction and construction related activities, materials, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.

**HAZ-7** **Disposal of Material in Landfills.** Prior to the start of construction, SBCTA will ensure that the designated contractor will be responsible for obtaining advanced approval from landfills to accept any impacted soil that will require disposal at an off-site landfill.

**WQ-1** **National Pollutant Discharge Elimination System Compliance.** SBCTA will ensure that its designated contractor comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006- DWQ.

**WQ-2** **Design Pollution Best Management Practices.** SBCTA will ensure that design pollution prevention BMPs are implemented, such as preservation of existing vegetation and slope/surface protection systems (permanent soil stabilization), as well as concentrated flow conveyance systems, such as concrete ditches, oversize drains, inlets, down drains, and storm drain pipes.

**WQ-3** **Best Management Practice Implementation.** SBCTA will ensure that the Caltrans-approved treatment BMP are implemented in accordance with the Storm Water Management Plan (SWMP) and consistent with the requirements of the NPDES Statewide Storm Water Permit Waste Discharge Requirements for Caltrans (Order No. 2012-0011-DWQ, NPDES No. CAS00003, adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (effective April 7, 2015). Treatment BMPs may include bio-swales and bio-strips.

**N-1** **Use of Mufflers for Construction Equipment.** During all site excavation and grading, SBCTA will equip all construction equipment, fixed or mobile, with

properly operating and maintained mufflers consistent with manufacturers' standards.

**N-2** **Placement of Stationary Construction Equipment.** During construction, SBCTA will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest to the Project limits.

**N-3** **Equipment Staging Areas.** During construction, SBCTA will locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest to the Project limits.

**N-4** **Caltrans Standard Special Provision 14-8.02.** During construction, SBCTA will ensure all heavy construction activities that would potentially exceed 86 dBA maximum noise level ($L_{max}$) at 50 feet will be conducted between 6:00 a.m. and 9:00 p.m. The Project will incorporate all applicable procedures and requirements detailed in the Caltrans Standard Special Provision (SSP) 14-8.02: Noise Control, as applicable.

**TR-1** **Transportation Management Plan.** During Final Design, a Transportation Management Plan (TMP) will be prepared for the Project. Key elements to be considered in the TMP include the following:

- Public Information
- Motorist Information Strategies
- Incident Management
- Construction Strategies
- Demand Management
- Alternative Route Strategies



DAVID BRICKER
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

Date

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# CHAPTER 1 PROPOSED PROJECT

## 1.1 Introduction

SBCTA, in cooperation with the City, and Caltrans, is proposing to improve the I-215/University Parkway Interchange in the City of San Bernardino, California. Caltrans is the Lead Agency under the California Environmental Quality Act (CEQA). Caltrans is also the Lead Agency under the National Environmental Policy Act (NEPA) as assigned by the Federal Highway Administration (FHWA), in accordance with NEPA (42 United States Code [USC] 4321 et seq.); and the Council on Environmental Quality (CEQ) Regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508).

A total of two alternatives are being evaluated as part of the I-215/University Parkway Interchange Improvement Project (Project). These two alternatives consists of the No-Build Alternative and the Build Alternative, a DDI. The Build Alternative is considered the proposed Project and proposes to reconstruct the existing tight diamond interchange configuration with a DDI. Bicycle and pedestrian uses will also be constructed along University Parkway along the entire length of the Project limits. A regional location map is provided on Figure 1-1 while the Project limits are illustrated on Figure 1-2.

The proposed Project is included in the Final 2019 Adopted Federal Transportation Improvement Program (FTIP) and the Southern California Association of Government's (SCAG) 2016 Regional Transportation Plan (RTP) (SCAG 2016) for San Bernardino County as Project ID: SBD59204.

The Project description provided in the Final Adopted 2019 FTIP and the Final 2016 RTP states the following:

> I-215 AT UNIVERSITY PARKWAY INTERCHANGE - RECONSTRUCT INTERCHANGE (Divergent Diamond)

Multiple conceptual designs were originally developed for the proposed Project, and two build alternatives (identified as Alternatives 2 and 3 in the Project Study Report-Project Development Support [PSR-PDS]) were carried forward for evaluation in the now-completed PSR phase of the proposed Project (Caltrans 2016). The PSR-PDS evaluated a No-Build Alternative and two Build Alternatives consisting of a partial cloverleaf (PSR-PDS Alternative 2) and DDI (PSR-PDS Alternative 3) design. During the PSR-PDS phase, the Traffic Engineering Performance Assessment (TEPA) analyses concluded that in 2040, the partial cloverleaf would only provide mitigation to peak hour operational deficiencies for the southbound (SB) on-ramp. However, the DDI alternative would provide mitigation to peak hour operational deficiencies for all the traffic movements. The DDI was determined as the most viable alternative due to its ability to address the current operational deficiencies while reducing the project construction duration and right-of-way impacts. After the PSR phase was completed, one alternative, previously Alternative 3, now in this document as the Build Alternative or proposed Project, was carried forward for detailed environmental analysis based on feedback from the City, SBCTA, Caltrans, and FHWA.

## 1.2 Project Setting

The existing I-215/University Parkway Interchange serves as a main point of access for students, faculty, and visitors of CSUSB. As illustrated on Figure 1-2, the Project limits lie between the Hallmark Parkway and North State Street along University Parkway and from Postmile (PM) 11.35/11.95 along I-215.

The Project limits are entirely located within Caltrans and City ROW. TCE will be needed from adjacent private properties to facilitate construction of the project. The area immediately adjacent to the Project limits is predominately developed and generally consists of a mix of residential, light industrial and commercial land uses, including gas stations, restaurants, motels, retail stores, self-storage, and a tutoring center. A major business retailer, Walmart, is located just west of the proposed Project limits. A Dollar Tree warehouse and distribution center is located just south of the proposed Project limits. Local bus route and stops are located along University Parkway. There are no schools, libraries, law enforcement, or emergency responders located along University Parkway or I-215 within the proposed Project limits. However, CSUSB is located outside the Project limits, to the northwest.

For the purposes of this document, the Project's existing conditions will serve as the baseline condition to evaluate the potential for significant impacts within Chapter 2 (CEQA Environmental Checklist) of this IS.

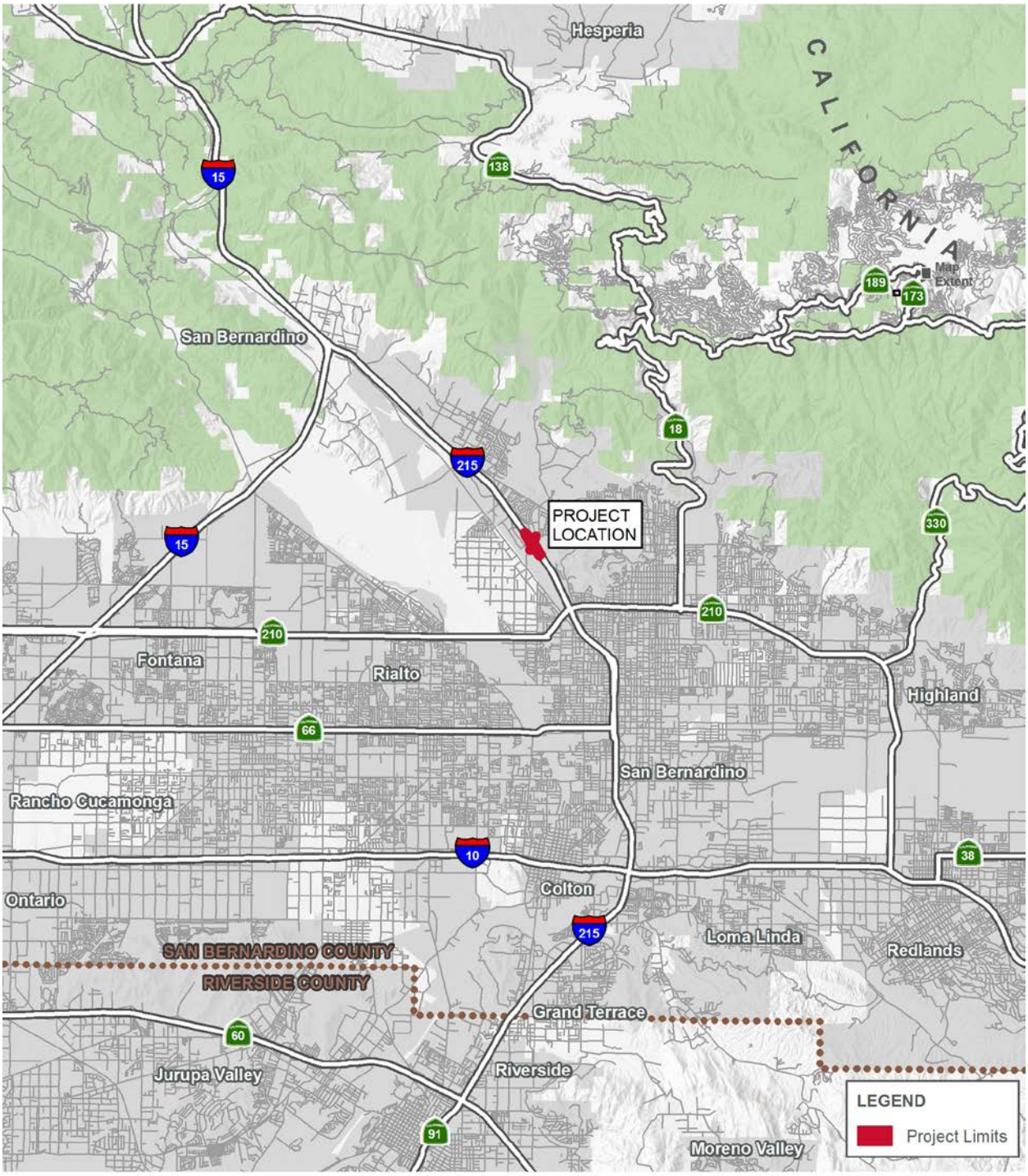


**Figure 1-1. Regional Location**

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**Figure 1-2. Project Limits**

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## 1.3 Project Description

A single Build Alternative and a No-Build Alternative are being evaluated as part of the proposed Project. As previously stated, the Project limits, as illustrated on Figure 1-2, are located within Caltrans and City ROW. The areas within and immediately adjacent to the Project limits are predominately developed and generally consist of commercial and retail land uses. The existing interchange serves as a main point of access for students, faculty, and visitors of CSUSB.

### 1.3.1 Purpose and Need

#### 1.3.1.1 Purpose

The purpose of the proposed Project is to plan for the projected regional population growth, CSUSB enrollment increases, and increased traffic demands at the existing I-215/University Parkway Interchange for the horizon year of 2040. The Project proposes to reconfigure the existing interchange to improve traffic operations. The Project objectives are to:

- Support planned regional growth and proposed local-area projects
- Relieve traffic congestion and related greenhouse gas (GHG) emissions by providing improved signalized intersection operational efficiency through the interchange area
- Improve vehicular, bicycle, pedestrian, and transit access through the freeway ramp intersections accommodating all modes of transportation (Complete Streets).

#### 1.3.1.2 Need

Extensive recent commercial and industrial development within the vicinity of the Project has contributed to growth in traffic within the Project limits and surrounding area, and has resulted in congestion and operational deficiencies at the University Parkway interchange. In addition, the anticipated increase in student population resulting from the planned expansion of CSUSB within the next 10 years will generate additional traffic that will further increase congestion at the interchange. The interchange is the primary freeway access for CSUSB, as well as a number of businesses and area residents. The existing operating conditions are expected to further worsen without any implementation of improvements.

## 1.3.2 Project Alternatives

### 1.3.2.1 No-Build Alternative

The No-Build Alternative would maintain the facility in its current condition. No improvements would be implemented at this time and therefore, no capital cost is associated with this alternative. As traffic demand increases due to the planned growth in the area, specifically at CSUSB, traffic operational characteristics would further deteriorate. The No-Build Alternative would not address or alleviate the forecasted operational and existing safety issues attributed to the severe congestion within the I-215/University Parkway interchange and would not satisfy the Project purpose and need.

### 1.3.2.2 Build Alternative – Diverging Diamond Interchange

The Build Alternative, or proposed Project, is a DDI and would provide operational improvements to traffic flow associated with the I-215/University Parkway Interchange. The Project proposes to replace the existing University Parkway tight diamond interchange configuration with a DDI configuration. The existing undercrossing would remain in place. This alternative would improve both ramp intersections of the current interchange, as well as directional movement through the system. Using the DDI configuration, the interchange would allow more efficient left-turn and right-turn movements at ramp terminals.

A DDI is the proposed design configuration for the I-215/University Parkway Interchange because of its ability to eliminate multiple traffic signal phases, which would reduce delay and improve traffic flow for multiple movements within the constrained area. A DDI would alleviate congestion within the interchange, along University Parkway and both ramp intersections.

Improvements under the proposed Project would occur within areas of previously disturbed soils located in the general vicinity of the existing I-215/University Parkway interchange. No building structures would be disturbed as part of the proposed Project, including the existing University Parkway undercrossing and I-215 bridge structure. ROW requirements would potentially include partial acquisitions and TCEs. Although no property relocations are anticipated as part of the proposed Project, changes to vehicular access at two areas along University Parkway are anticipated. These access changes are described in Table 1-1.

**Table 1-1. Changes to Driveway Access on Adjacent Properties**

| Property | Location | Changes to Access |
|---|---|---|
| Scottish Rite Property | 4400 North Varsity Avenue | Primary driveway access for the Scottish Rite property exists off of North Varsity Avenue. A secondary driveway for the property is located off of University Parkway. This secondary driveway access will be relocated just north of the existing secondary driveway on University Parkway as part of the proposed Project. |
| Retail Plaza | 4004-4020 University Parkway | The southern driveway for this retail plaza located off of University Parkway will be modified to improve vehicular access.<br>The northern driveway, which currently serves as the main point of access for the Jack in the Box restaurant within this retail strip plaza off of University Parkway, would be removed after modifications to the southern driveway are complete. |

As discussed in Table 1-1, two driveways currently serve the Scottish Rite property, located at 4400 North Varsity Avenue. Primary driveway access for this property exists off of North Varsity Avenue, and secondary driveway access exists off of University Parkway, just north of the I-215 northbound (NB) on-ramp. The secondary driveway access for the Scottish Rite property would be relocated north of its current location along University Parkway. Removal of the existing secondary driveway off of University Parkway would occur after the relocated secondary driveway is complete.

A retail plaza located at 4004 – 4020 University Parkway would also experience changes to vehicular and pedestrian access. This retail plaza currently includes a standalone Jack in the Box restaurant and a retail strip mall that currently includes the following four retail business: Verizon Wireless, Mimi's Donuts and Ice Cream, Honey's Fashion, and a dental office.

Two driveways located off of University Parkway currently serve this retail plaza. The northern driveway serving this retail plaza closest to the SB I-215 off-ramp would be removed as part of the proposed Project. Prior to removal of the northern driveway, the southern driveway (also located on University Parkway) would be modified to improve vehicular access to the retail plaza. Parking within the retail plaza would be modified as part of the proposed Project. However, at a minimum, the number of parking spaces removed would be replaced.

Additional improvements as part of the proposed Project include the provision of street lighting; traffic signal modifications; minor paving; minor utility relocations; signage changes; restriping, turn lanes; and bicycle, pedestrian, and median streetscape improvements. Bicycle and pedestrian access within the Project limits will be maintained throughout construction activities. No transmission towers are located within the Project limits.

The areas where temporary construction-related signage and temporary delineation for traffic lanes are expected to occur are identified on Figure 1-2. Construction-related signage would require ground disturbance of approximately 2 feet below ground surface (bgs), with the disturbance area measuring 8 inches in diameter for temporary construction area sign posts. The construction staging is anticipated to occur within the existing ROW and the limits shown on Figure 1-2.

### 1.3.3 Alternatives Considered but Eliminated from Further Discussion

During the Project Initiation Document (PID) Phase, the Project was led by the City; however in October 2016, the City and SBCTA signed a cooperative agreement that approved SBCTA as the new sponsor local agency for the Project during the Project Approval/Environmental Document (PA/ED) and final design phase.

A Project Study Report - Project Development Support (PSR-PDS) was approved by Caltrans District 8 in October 2016. The PSR-PDS included two project build alternatives (Alternatives 2 and 3) to reconfigure the existing tight diamond interchange. The two alternatives included in the PSR-PDS included a single SB loop on-ramp and the DDI. Both options were evaluated against the following criteria to determine if the alternatives should be carried forward to the PA/ED Phase: traffic operations, design, environmental, ROW, and project costs.

When evaluating the single SB loop on-ramp alternative, the following was determined: The single SB loop on-ramp alternative would not fully address the local traffic deficiencies and would not address the freeway access needs in the NB direction; the NB ramp interchange would still be operating at level of service (LOS) F. Due to the deficiencies for the NB intersection, it is anticipated that further improvements would need be to done under another project to address the NB intersection. Additionally, the single SB loop on-ramp would require relocations of four businesses and two full commercial property acquisitions, as well as numerous impacts on sensitive environmental areas including removal of trees and vegetation within California Gnatcatcher habitat, a state and federally protected species.

The anticipated Project cost for the single SB loop on-ramp alternative would require $13.6 million alone for ROW, substantially more than the DDI alternative. Additionally, the DDI alternative would remain in the existing ROW, limited to TCEs and adjustments to access rights, and improve both the NB and SB ramp intersections to acceptable LOS.

## 1.4 Permits and Approvals Needed

The permits, reviews, and approvals, detailed in Table 1-2, would be required for Project construction.

**Table 1-2. Permits, Reviews, and Approvals**

| Agency | Permits/Approvals | Status |
|---|---|---|
| State Water Resources Control Board (SWRCB) | Section 402 NPDES/Caltrans NPDES Permit CAS000003 and CAS000002 (Construction General Permit) | The Construction General Permit has been adopted and was effective as of July 1, 2010.<br>The Caltrans NPDES Permit was effective as of July 1, 2013. |

| | | |
|---|---|---|
| Affected utilities | Approvals to relocate, protect in place, or remove utility facilities | Prior to any construction that would affect utility facilities. |
| San Bernardino County Flood Control District | Encroachment Permit | Letter or permit would be obtained prior to construction. |
| City of San Bernardino | Approval of Encroachment permits and street construction permits, street closures and rerouting, and associated improvements within the public ROW | Actions/permits would be obtained prior to the start of construction. |
| Sanitation District of San Bernardino | Construction Work Discharge Permit | Required for discharge of construction water into local sewer system. To be applied for prior to construction. |

Notes:
Caltrans=California Department of Transportation; NPDES=National Pollutant Discharge Elimination System; ROW=right-of-way; SAFETEA-LU=Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users; SWRCB=State Water Resources Control Board

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# CHAPTER 2 CEQA ENVIRONMENTAL CHECKLIST

## Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Please see the checklist beginning on Page 2-4 for additional information.

| | | | | | |
|---|---|---|---|---|---|
| ☐ | Aesthetics | ☐ | Agriculture and Forestry | ☐ | Air Quality |
| ☐ | Biological Resources | ☐ | Cultural Resources | ☐ | Energy |
| ☐ | Geology/Soils | ☐ | Greenhouse Gas Emissions | ☐ | Hazards and Hazardous Materials |
| ☐ | Hydrology/Water Quality | ☐ | Land Use/Planning | ☐ | Mineral Resources |
| ☐ | Noise | ☐ | Population/Housing | ☐ | Public Services |
| ☐ | Recreation | ☐ | Transportation | ☐ | Tribal Cultural Resources |
| ☐ | Utilities/Service Systems | ☐ | Wildfire | ☐ | Mandatory Findings of Significance |

## Determination

On the basis of this initial evaluation:

☒ I find that the project would not have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project may have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

7/10/2019

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District 8, Division of Environmental Planning
California Department of Transportation

Date

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

## Project Impact Analysis under CEQA for Initial Study

CEQA broadly defines “project” to include “the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment” (14 CCR § 15378). Under CEQA, the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. The CEQA Guidelines require a “statement of objectives sought by the proposed project” (14 CCR § 15124(b)).

CEQA requires the identification of each “significant effect on the environment” resulting from the action, and ways to mitigate each significant effect. Significance is defined as “Substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project” (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the Project.

The legal standard for determining the significance of impacts is whether a “fair argument” can be made that a “substantial adverse change in physical conditions” would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in a particular area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt ***thresholds of significance,*** which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and its varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing ***thresholds of significance*** on a State-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts based on their location and the effect of the potential impact on the resource as a whole in the project limits. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a “less than significant” determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered “significant.”

If the action may have a significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a ND if there is no substantial evidence that the project may have a significant effect on the environment (14 CCR § 15070(a)). A proposed ND must be circulated for public review, along with a document known as an IS. CEQA allows for a “mitigated ND,” in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5). Proposed mitigation measures must generally be subject to public review prior to adopting a mitigated ND (14 CCR § 15073.5 [new mitigation measures necessary to reduce a significant impact require recirculation]; 15074.1 [different mitigation measures may be substituted if they are equally effective if the lead agency holds a hearing and

makes a specific finding]). Measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)).

Regulatory agencies may require additional measures beyond those required for compliance with CEQA. These can be identified in the IS as “mitigation”, Good Stewardship or Best Management Practices, or identified after the IS/ND is approved.

CEQA documents must consider direct and indirect impacts of the project (CAL. PUB. RES. CODE § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

## 2.1 Aesthetics

| **AESTHETICS**: Except as provided in Public Resources Code Section 21099, would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect on a scenic vista? | ☐ | ☐ | ☐ | ☒ |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | ☐ | ☐ | ☐ | ☒ |
| c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality? | ☐ | ☐ | ☒ | ☐ |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | ☐ | ☐ | ☒ | ☐ |

### 2.1.1 Discussion of Environmental Evaluation Question 2.1 – Aesthetics

The information used in this section is from the *I-215/University Parkway Interchange Improvement Project Visual Impact Assessment* (VIA) (Caltrans 2019d). For purposes of this section, the area of analysis to determine visual impacts is defined as the Project limits.

**a)** **No Impact.** The proposed Project is not located within a scenic vista as designated by the San Bernardino General Plan Natural Resources and Conservation Element (City of San Bernardino 2005a). The San Bernardino Mountains have been identified by the Natural Resources and Conservation Element. However, the proposed Project would not consist of a vertical change and would not alter existing views to the scenic resources from within the Project limits. Therefore, no impact associated with this issue area is anticipated to occur with implementation of the proposed Project.

**b)** **No Impact.** According to the Caltrans California Scenic Highway Mapping System (Caltrans 2011), I-215 is not identified as a scenic highway, nor are there any state scenic highways located within the vicinity of the proposed Project. Therefore, no impact is identified for this issue area.

**c)** **Less than Significant Impact.** The proposed Project is located in a primarily developed area with commercial land uses. As discussed in the VIA prepared for the proposed Project, the I-215/University Parkway intersection is identified as a Gateway within the City of San Bernardino University District Specific Plan (City of San Bernardino 2005b). The University District Specific Plan identifies goals, policies, design elements, and requirements that govern the area within the Project limits.

Roadway improvements as part of the proposed Project are subject to Caltrans' Deputy Directive DD-64-R2 (Complete Streets – Integrating the Transportation System) (October 2014). As defined by Caltrans, a Complete Street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility.

Every Complete Street looks different, according to its context, community preferences, and the types of road users and their needs. Roadway improvements contemplated as part of the proposed Project, would be consistent with the design elements and Complete Streets goals and policies.

A plan view of the proposed changes is provided as Figure 2-1. The plan view shows how pedestrians, bicyclists, and vehicles will navigate through the new DDI interchange under the proposed Project. Additionally, three visual simulations were produced to show the proposed Project changes. Figure 2-2 and Figure 2-3 show Key Viewpoints 1 and 2, respectively. These two Key Viewpoint locations selected for the proposed Project show the existing setting. Figure 2-4 provides a photorealistic simulation of Key Viewpoint 2. Key Viewpoint 2 shows the anticipated Project design. Two additional simulations, Figure 2-5 and Figure 2-6, were prepared to show further detail of anticipated Project design and overall aesthetic changes as a result of the proposed Project.

The improvements proposed under the proposed Project would be consistent with the University District Specific Plan guidelines for local roadways, the identified gateway intersection at I-215 and University Parkway, and the Caltrans Complete Streets directive. Additionally, Minimization Measure VIS-2, identified in Section 2.1.2, would develop a landscape plan that would minimize the removal of mature trees. Incorporation of Measure VIS-2 would minimize impacts on removal of mature trees and ensure adequate landscaping within the Project limits. Therefore, a less than significant impact is identified for this issue area.

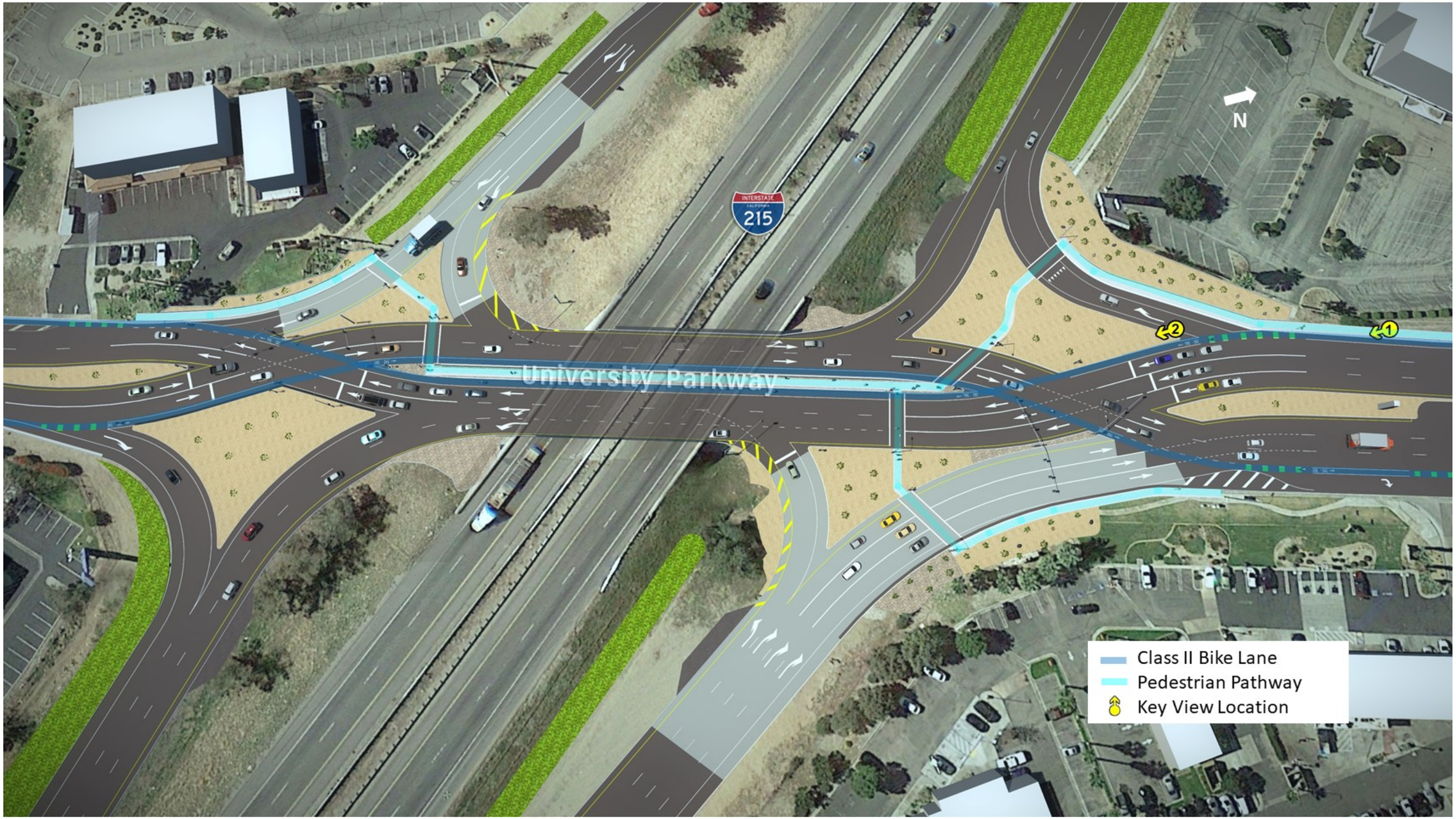


**Figure 2-1. Plan View**

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**Figure 2-2. Key View Location 1 – Existing Setting**

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**Figure 2-3. Key View Location 2 – Existing Setting**

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**Figure 2-4. Key View Location 2 – Photorealistic Simulation**
***Disclaimer: The Aesthetic features shown in the above simulation are subject to change during the design phase.**

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**Figure 2-5. North End of Diverging Diamond Interchange Core Looking East**
***Disclaimer: The Aesthetic features shown in the above simulation are subject to change during the design phase.**

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**Figure 2-6. North End of Diverging Diamond Interchange Core Looking West**
***Disclaimer: The Aesthetic features shown in the above simulation are subject to change during the design phase.**

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**d)** **Less than Significant Impact.** The Project limits currently receive light and glare from traffic, street lighting, traffic signals, freeway on- and off-ramps, paved surfaces, and the surrounding commercial businesses. Existing lighting on the streets and along the ramps would be modified or relocated as a part of the proposed Project. Any lighting, at a minimum, would be replaced in kind. Measure VIS-1 would minimize potential impacts related to light and glare during construction and operation by selecting and utilizing lighting fixtures that will minimize additional light and glare to traveling motorists, bicyclists, and pedestrians, as well as on to adjacent businesses and into the night sky. Minimization Measures VIS-3 through VIS-5 would ensure that coordination with the City be conducted to ensure consistency with the San Bernardino General Plan Urban Design Element and University District Specific Plan, as well as produce a Conceptual Plan for compliance with applicable San Bernardino General Plan policies and guidelines. With implementation of the identified minimization measures, impacts associated with this issue would be reduced to a less than significant level.

## 2.1.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following measures will be incorporated to minimize the visual and aesthetic impacts as a result of the proposed Project.

**VIS-1** **Lighting Plan.** Lighting fixtures will be selected and installed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with non-glare hoods and focused within the Project ROW. The lighting plan will be reviewed and approved by the City of San Bernardino's Resident Engineer and Caltrans District 8 Landscape Architect prior to construction to ensure compliance with these criteria.

**VIS-2** **Landscape Plan.** A highway landscape plan will be prepared that identifies all opportunities to use areas within the state ROW for full landscaping consistent with the Caltrans Highway Design Manual. This will include landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new project structures, such as ramps and tunnels to the extent feasible. This plan will incorporate all applicable procedures and requirements detailed in the Caltrans Highway Design Manual, Section 902.1, Planting Guidelines (November 2001), and policies of the City of San Bernardino's General Plan and Municipal Code, as applicable.

During Final Design, the Caltrans District 8 Landscape Architect will verify that the design minimizes removal of existing mature trees. If removal of mature trees cannot be avoided, additional landscape improvements will be incorporated into the Final Design for these areas. The replacement ratio of any trees removed will be determined by the Caltrans District 8 Landscape Architect.

**VIS-3** **San Bernardino General Plan Urban Design Element.** During Final Design, the City of San Bernardino's Resident Engineer will verify that design elements are consistent with the vision for the City regarding aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage.

**VIS-4** **University District Specific Plan.** During Final Design, the City of San Bernardino's Resident Engineer will verify that design elements are consistent with

the vision for the University District Specific Plan regarding gateways, aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage.

**VIS-5** **Conceptual Plan.** During Final Design, a conceptual plan will be utilized and coordinated among the City of San Bernardino, SBCTA, and Caltrans District Landscape Architect to ensure consistency with the I-215 San Bernardino Master Plan guidelines, San Bernardino General Plan Urban Design Element, and the University District Specific Plan.

## 2.2 Agriculture and Forest Resources

| | **AGRICULTURE AND FOREST RESOURCES**: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|---|
| a) | Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | ☐ | ☐ | ☐ | ☒ |
| b) | Conflict with existing zoning for agricultural use, or a Williamson Act contract? | ☐ | ☐ | ☐ | ☒ |
| c) | Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | ☐ | ☐ | ☐ | ☒ |
| d) | Result in the loss of forest land or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |
| e) | Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | ☐ | ☐ | ☐ | ☒ |

### 2.2.1 Discussion of Environmental Evaluation Question 2.2 – Agriculture and Forest Resources

For purposes of this section, the area of analysis to determine agriculture and forest resource impacts is defined as the Project limits.

**a)** **No Impact.** According to the California Department of Conservation California Important Farmland Finder (California Department of Conservation 2019), the area within the proposed Project limits is classified as Urban and Built-Up land and does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide importance. Additionally, the City's General Plan (City of San Bernardino 2005a) does not identified any farmland with the Project limits. Implementation of the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, no impact is identified for this issue area, and no mitigation measures are required.

**b)** **No Impact.** According to the California Department of Conservation's Williamson Act Maps (California Department of Conservation 2016), no Williamson Act contracted lands are located within the City's limits. Based on the City's Zoning Map (City of San Bernardino 2019), land within the Project limits is zoned for general commercial use and does not contain any Williamson Act or zoned farmland. Since the proposed Project is not located on or adjacent to land zoned for agricultural use or designed as Williamson Act land, implementation of the proposed Project would not conflict with existing zoning for agricultural use. Therefore, no impact is identified for this issue area, and no mitigation measures are required.

**c)** **No Impact.** Based on the City's Zoning Map (City of San Bernardino 2019), land within the Project limits is zoned for general commercial uses and is not located on forest land as defined in Public Resources Code (PRC) Section 1220 (g). There are no existing forest lands, timberlands, or timberland zoned Timberland Production either on site or in the immediate vicinity. Implementation of the proposed Project would not conflict with existing zoning of forest land or cause rezoning of any forest land. Therefore, no impact is identified for this issue area, and no mitigation measures are required.

**d), e)** **No Impact.** As previously discussed in Response 2.a, 2.b, and 2.c, the proposed Project is not located in an area designated or zoned as farmland or forest. Implementation of the proposed Project would not result in the loss or conversion of farmland or forest to non-agricultural or non-forest uses. Therefore, no impacts are identified for these issue areas, and no mitigation measures are required.

### 2.2.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for agricultural or forestland resources.

## 2.3 Air Quality

| **AIR QUALITY**: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | ☐ | ☐ | ☒ | ☐ |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | ☐ | ☐ | ☒ | ☐ |
| c) Expose sensitive receptors to substantial pollutant concentrations? | ☐ | ☐ | ☒ | ☐ |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | ☐ | ☐ | ☒ | ☐ |

### 2.3.1 Discussion of Environmental Evaluation Questions 2.3 – Air Quality.

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Air Quality Report* (Caltrans 2018c).

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality, while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS).

NAAQS and state ambient air quality standards have been established for six transportation related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide ($NO_2$), ozone ($O_3$), sulfur dioxide ($SO_2$), and particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller ($PM_{10}$) and particles of 2.5 micrometers and smaller ($PM_{2.5}$). In addition, national and state standards exist for lead (PB), and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

The proposed Project is located in the City of San Bernardino region of San Bernardino County, an area within the South Coast Air Basin (SCAB), which includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality regulation in the SCAB is administered by the SCAQMD, a regional agency created for the basin.

**a)** **Less than Significant Impact.** A project would conflict with or obstruct implementation of a regional air quality plan if it would be inconsistent with the growth assumptions of the plan, in terms of population, employment, or regional growth in vehicle miles traveled (VMT). The proposed Project is included in the regional emission analysis conducted by the Southern California Association of Governments (SCAG) for the conforming *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), which was found to be conforming by the FHWA/Federal Transit Administration (FTA) on June 1, 2016. The proposed Project is also included in the 2019 Federal Transportation Improvement Program (FTIP), which was found to be conforming by the FHWA/FTA on December 18, 2018 (Project ID: SBD59204; Description: I-215 at University Parkway Interchange – reconstruct interchange [Diverging Diamond]). The design concept and scope of the proposed Project is consistent with the project description provided in the 2016 RTP/SCS, 2019 FTIP, and the "open to traffic" assumptions of SCAG's regional emissions analysis.

With regards to operation of the proposed Project, it is not a new or expanded highway project and would not increase traffic volumes along I-215, University Parkway, or any of the highway ramps. Thus, the proposed Project would not result in significant air quality impacts during operation. Therefore, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. A less than significant impact has been identified for this issue area.

**b)** **Less than Significant Impact.** Temporary construction activities for all improvements are anticipated to begin in 2020 and end in 2020. Pollutant emissions would vary daily based on the level of activity, specific operations, and prevailing weather operations. Short-term air quality degradation may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, $NO_X$, ROG, directly emitted particulate matter ($PM_{10}$ and $PM_{2.5}$), and toxic air contaminants, such as diesel exhaust PM. As detailed in the Air Quality Report (Caltrans 2018c), construction-period criteria pollutant emissions were estimated using the Sacramento Metropolitan Air Quality Management District's Roadway Construction Emissions Model version 9.0.0. While the model was developed for Sacramento conditions in terms of fleet emission factors, silt loading, and other modeling assumptions, it is considered adequate for estimating road construction emissions by SCAQMD in its CEQA guidance (SCAQMD 2015) and is used for that purpose in this analysis. Table 2-1 provides a summary of peak daily construction emissions that would be generated by construction of the proposed Project.

**Table 2-1. Construction Emissions Summary**

| | $PM_{10}$ (pounds/day) | $PM_{2.5}$ (pounds/day) | CO (pounds/day) | $NO_x$ (pounds/day) |
|---|---|---|---|---|
| Grubbing/land clearing | 20.88 | 4.81 | 11.63 | 21.68 |
| Grading/ excavation | 25.04 | 8.60 | 74.06 | 122.94 |
| Drainage/utilities/ sub-grade | 23.55 | 7.29 | 54.49 | 84.65 |
| Paving | 1.01 | 0.77 | 14.73 | 20.67 |
| **Maximum daily or average daily** | **25.04** | **8.60** | **74.06** | **122.94** |
| **SCAQMD Daily Thresholds** | **150** | **55** | **550** | **100** |
| **Emissions Exceeds Daily Threshold?** | No | No | No | **Yes** |

Source: Caltrans 2018c

As shown in Table 2-1, the only pollutant to exceed the SCAQMD Regional Emissions Daily Significance Threshold would be $NO_X$ during grading/excavation activities. However, this exceedance would be temporary and minimized through the incorporation of exhaust and fugitive dust emission control Minimization Measures AQ-1 through AQ-10, listed in Section 2.3.2. Incorporation of these minimization measures would ensure temporary construction impacts on air quality are less than significant.

Project-related emissions would have a significant environmental impact if they result in pollutant emissions levels that either create or worsen a violation of an ambient air quality standard or contribute to an existing air quality violation. The proposed Project would not generate or increase traffic volumes along I-215, University Parkway, or any of the highway ramps, as it would not construct new residential or commercial uses. Therefore, the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant. No operational impacts on air quality would occur.

**c)** **Less than Significant Impact.** As detailed in the Air Quality Report (Caltrans 2018c), the proposed Project is not a new or expanded highway project and would not increase traffic volumes along I-215, University Parkway, or any of the highway ramps. In addition, the proposed Project would improve existing traffic congestion at the I-215/University Parkway Interchange. Thus, the Project would not result in significant air quality impacts during operation. However, as identified in Table 2-1, the SCAQMD daily threshold would be exceeded for $NO_X$ during grading/excavation activities. This exceedance would be temporary and minimized through the implementation of exhaust and fugitive dust emission control measures, identified as Minimization Measures AQ-1 through AQ-10. With incorporation of Minimization Measures AQ-1 through AQ-10, NOx construction emissions would be reduced to below the SCAQMD

daily thresholds for criteria pollutants. Therefore, the proposed Project would result in less than significant impacts associated with a criteria pollutant.

**d)** **Less than Significant Impact**. The ARB's Air Quality and Land Use Handbook identifies a list of the most common sources of odor complaints received by local air districts. Typical sources of odor complaints include facilities such as sewage treatment plants, landfills, recycling facilities, petroleum refineries, and livestock operations.

During Project construction odors could be generated from construction equipment exhaust and asphalt application. However, as construction activities would be temporary, odors associated with construction equipment would be short-term, intermittent in nature, and would cease upon completion of the construction phase. Furthermore, compliance with SCAQMD Rule 402, which prohibits the discharge of air contaminants causing nuisance or annoyance, would ensure that odor emissions and their associated impacts would be minimized. Therefore, Project construction would not result in other emissions, such as odors, that would adversely affect a substantial number of people, and short-term impacts would be less than significant. Operation of the proposed Project would not involve any odor-generating uses. Therefore, the proposed Project would not result in other emissions (such as those leading to odors) that would affect a substantial number of people. Impacts associated with this issue would be less than significant.

## 2.3.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following measures will be incorporated to minimize the air quality impacts as a result of the proposed Project.

**AQ-1** **SCAQMD Rule 403.** During clearing, grading, earthmoving, and excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in SCAQMD Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in the Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.

**AQ-2** **Ozone Precursor Emissions Control.** Project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

**AQ-3** **State Vehicle Code Requirements.** During construction, all trucks that are used to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

**AQ-4** **Caltrans Standard Specifications Section 14-9-02.** During construction, the contractor will adhere to the Caltrans Standard Specifications for Construction (Section 14.9). Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

**AQ-5** **Fugitive Dust Emissions - Dust.** Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

**AQ-6** **Soil Binding Elements.** Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.

**AQ-7** **Fugitive Dust Emissions – Truck Washing.** Trucks will be washed as they leave the ROW, as necessary to control fugitive dust emissions.

**AQ-8** **California Code of Regulations Title 17, Section 93114.** Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114.

**AQ-9** **Dust Control Plan.** A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.

**AQ-10** **Equipment and Storage Site Requirements.** Equipment and material storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

## 2.4 Biological Resources

| **BIOLOGICAL RESOURCES**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | ☐ | ☐ | ☒ | ☐ |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☐ | ☒ |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | ☐ | ☐ | ☒ | ☐ |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | ☐ | ☐ | ☐ | ☒ |

### 2.4.1 Discussion of Environmental Evaluation Question 2.4 – Biological Resources

The information in this section is based on the *I-215/University Parkway Interchange Improvement Natural Environmental Study (Minimal Impact)* (NES[MI]) (Caltrans 2018d). For purposes of this section, the area of analysis to determine biological resource impacts is defined as the BSA, which is included in Appendix H, Maps. The BSA is defined as the Project limits associated with the proposed Project activities and a 50-foot buffer around the Project limits.

**a) Less than Significant Impact.**

*Special-Status Plant Species.* Based on information contained in the NES(MI), the BSA does not contain habitat that would support any of the special-status plant species known to occur in the region. Therefore, the proposed Project would not result in impacts on any special-status plant species, and no mitigation measures are required.

*Special-Status Wildlife Species.* Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring onsite. Of the five federally and/or state-listed endangered or threatened or proposed endangered or threatened species known to occur within the vicinity of the Project, only CAGN (*Polioptila californica*) was determined to have potential for occurrence within the BSA in CBS and CBS (Disturbed) habitats. Of the 12 non-listed special-status wildlife species known to occur within the vicinity of the proposed Project, three were determined to have potential for occurrence within the BSA: BUOW (*Athene cunicularia*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and Los Angeles pocket mouse (*Perognathus longimebris brevinasus*). Suitable habitat to support these species within the BSA occurs in the CBS, CBS (Disturbed), and non-native grassland communities at the southern end of the BSA. None of these species were observed within the BSA during the field survey.

*California Gnatcatcher.* There is a total of 1.8 acres of low-quality suitable habitat for CAGN within the BSA. As previously stated, no CAGN were detected in or adjacent to the BSA during the field survey. The nearest documented observation of CAGN in the vicinity of the Project is 1.75 miles northeast of the Project limits; however, this record dates from 1925. Additionally, the BSA is isolated from large tracts of suitable habitat on both sides of I-215, and suitable habitat within the BSA is in close proximity to high levels of traffic and traffic noise associated with I-215. As a result, CAGN has a low probability of occurring within the BSA.

Although the BSA is not located within any designated critical habitat for CAGN, implementation of the proposed Project would result in direct impacts on 0.05 acre of low-quality suitable CAGN habitat. If CAGN occupy the CBS or CBS (Disturbed) communities within the BSA, the proposed Project could potentially result in indirect impacts to this species as a result of a temporary increase in noise and activity levels in adjacent areas. Generally, CAGN within adjacent areas would be able to move away from disturbance areas, and indirect impacts would not be substantial. However, if CAGN are nesting adjacent to active Project disturbance areas, the proposed Project could result in take of CAGN, which would be considered a significant impact. While possible, the likelihood of CAGN nesting in or adjacent to the BSA is low due to the disturbed environment and high levels of human activity within the BSA. To avoid direct impacts to CAGN, Avoidance and Minimization Measures BIO-1 through BIO-5 will be incorporated. Incorporation of these measures would ensure impacts to CBS and CAGN are less than significant.

*Burrowing Owls.* BUOWs are found in open habitats where brush or tree cover is less than 30 percent, such as dry grasslands; agricultural and range lands; railroad ROW; and margins of highways, golf courses, and airports. The BUOW often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles while avoiding thick, tall vegetation, brush, and trees. Based on the habitat suitability assessment conducted for the proposed Project, marginally suitable BUOW habitat within the BSA is confined to a small portion of non-native

grassland on the eastern slope of I-215, just south of the northbound University Parkway off-ramp. Due to the proximity of this area to the 700 acres of undeveloped land associated with Shandin Hills, there is the potential for BUOW to use the BSA for foraging.

The proposed Project would not result in any permanent or temporary direct impacts to potentially suitable BUOW habitat within the BSA. To avoid indirect impacts to BUOW that may occur in non-native grassland habitat adjacent to proposed Project work areas, Avoidance Measure BIO-6 would be incorporated. The incorporation of Avoidance Measure BIO-6 would ensure impacts associated with this issue are less than significant.

*Bats.* The I-215 bridge over University Parkway provides low-quality suitable habitat for roosting bats. Due to the type of bridge construction, the bridge does not support crevices that meet "ideal" conditions for day roosts, such as water-protected vertical crevices between 0.5 and 1.25 inch wide and at least 12 inches deep, and not being situated over busy roadways. Night roosts do not require crevices but are generally located in close proximity to foraging habitat, such as riparian habitat. Based on a review of aerial photographs, the nearest riparian habitat is an approximately 1-acre area associated with a mitigation project at Cesar Chavez Middle School, approximately 3.1 miles north of the BSA. Pocketed free-tailed bats have been documented to use bridges in other areas, but their use of bridges has not been documented in California.

None of the special-status bat species known to occur in the region are expected to roost in the BSA. In addition, due to the lack of preferred crevices, high amount of traffic under the I-215 bridge, and distance from foraging habitat, bats are not likely to occur within the BSA. Bat signs were not observed during the field survey; however, surveys were conducted during the daytime when bats are typically roosting and more difficult to observe. A focused survey to determine the presence of bats was not conducted, as this species has a low potential to roost within the BSA.

The proposed Project would not result in direct impacts to the I-215 over University Parkway bridge; however, work under the bridge could result in indirect impacts to roosting bats due to factors such as exhaust from construction equipment or lighting used during nighttime work. These impacts may be considered significant, however, the incorporation of Avoidance Measures BIO-7 and BIO--8 impacts to roosting bats would ensure a less than significant impact if indirect impacts to roosting bats occurs as a result of the proposed Project.

*Other Special-Status Wildlife Species.* Black-tailed jackrabbit and Los Angeles pocket mouse have potential to use CBS and CBS (Disturbed) habitats within the BSA. There is a total of 1.8 acre of CBS and CBS (Disturbed) within the BSA, of which the proposed Project would result in direct impacts to 0.05 acre of CBS and CBS (Disturbed) habitat. Although none of these species were observed within the BSA during the field survey, Avoidance and Minimization Measures BIO-1 through BIO-8 would be incorporated to reduce Project impacts to special-status wildlife species within and/or adjacent to Project work areas.

*Migratory Bird Treaty Act (MBTA) Species.* Habitat supporting nesting for birds protected under the MBTA occurs throughout the BSA. Implementation of Avoidance and Minimization Measures BIO-1 through BIO-5 and Avoidance Measure BIO-9 would be incorporated to avoid impacts to birds nesting in vegetation within and

adjacent to Project work areas. Incorporation of these measures would reduce impacts associated with this issue to a less than significant level.

**b)** **Less Than Significant Impact.** Natural communities are considered to be of special concern based on three factors: (1) federal, state, or local laws regulating their development; (2) limited distribution; and/or (3) the habitat requirements of special-status plants or animals occurring in those habitats. Special interest natural communities identified in the region include southern cottonwood willow riparian forest, southern mixed riparian forest, southern riparian forest, southern riparian scrub, and southern sycamore alder riparian woodland. As identified in the NES(MI), the BSA does not support any of these natural communities. However, the BSA does support CBS and CBS – disturbed, which has the potential to provide habitat for a number of special interest plant and wildlife species. Despite the presence of CBS, the habitat within the BSA is of low species diversity, located adjacent to I-215, and previously subjected to clearing by fire.

The proposed Project would result in direct permanent and temporary impacts to CBS habitat through disturbance and/or removal of existing vegetation. Areas of temporary impacts would only be affected during construction to allow for construction and equipment staging. Temporarily impacted CBS habitat within the BSA would be restored to natural contours and hydroseeded with CBS species following completion of construction activities that encroach on these areas. Permanent impacts may include complete removal of vegetation within the CBS community to provide for the extension of the I-215 southbound ramp at University Parkway. To ensure impacts to the CBS habitat and to the special interest species that could occur in CBS habitat are avoided or minimized, Measures BIO-1 through BIO-4 would be incorporated. With incorporation of Measures BIO-1 through BIO-4, impacts associated with this issue would be reduced to a less than significant level.

**c)** **No Impact.** A delineation of waters of the U.S. and waters of the state was completed in March 2017 and is summarized in the NES(MI). The BSA is located on an alluvial fan at the base of the San Bernardino Mountains. As a result of flood control modifications to support urban development, the majority of natural flows that occur upstream of the BSA are channeled into Devil Creek, which is located approximately 4,500 feet north of the BSA. Based on a review of historic aerial photographs and information contained in the NES(MI), there are no naturally occurring drainages within the BSA.

Three ephemeral ditches were identified within the BSA, all adjacent to the roadway shoulders or within the I-215 gore areas. As-built drawings from 1955 show all drainage features within the BSA were constructed as part of the original interchange project and were constructed solely in uplands to convey surface flow off of the roadway and shoulders into Macy basin, located approximately 0.25 mile west of the Project limits. Macy Basin serves as a detention basin and only outlets to downstream channels when unusually high amounts of rainfall occur.

The U.S. Army Corps of Engineers (USACE) generally does not assert jurisdiction over drainages excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water (USACE 2007). Therefore, it is anticipated that drainages within the BSA would not be subject to USACE jurisdiction under Section

404 of the Federal Clean Water Act (CWA)[1] and would not require a 401 certification from the Regional Water Quality Control Board. Therefore, no impact is identified for this issue area.

CDFW regulates substantial modification of bed and bank or diversion or obstruction of flows of a stream pursuant to Section 1600 of the California Fish and Game Code and requires a Streambed Alteration Agreement when it determines that the activity may substantially adversely affect existing fish or wildlife resources. Since drainage features within the BSA are ephemeral concrete lined or earthen ditches located wholly within freeway gore areas, they likely do not provide habitat for aquatic or other wildlife species. Additionally, as flows are conveyed from these drainages into a mostly-isolated detention basin, downstream habitat would also not be affected. Therefore, drainage features within the BSA are likely not subject to CDFW jurisdiction under Section 1600 of the California Fish and Game Code. Therefore, no impact is identified for this issue area.

**d)** **No Impact.** Wildlife movement corridors, also called dispersal corridors or landscape linkages, are linear features primarily connecting at least two substantial habitat areas. Wildlife corridors and linkages are important features in the landscape, and the viability and quality of a corridor or linkage are dependent upon site-specific factors. The southeastern portion of the BSA is adjacent to Shandin Hills, a low-elevation mountain range, which provides an estimated 700 acres of open space. Shandin Hills is surrounded by development and completely isolated from any other open space areas. Although this area provides local connectivity for urban-tolerant wildlife species, such as coyotes, birds, and rabbits, it is not connected to a larger wildlife linkage or corridor. There is also an estimated 16-acre area of undeveloped land adjacent to the western edge of the BSA that consists of disturbed habitat completely surrounded by development. It is isolated from any other open space areas and does not provide any direct linkage to Cajon Wash/Lytle Creek located approximately 1.75 mile west of the BSA. In addition, the City's General Plan does not identify the areas within the Project limits as a migratory wildlife corridor, nor does it qualify for use as a native wildlife nursery site. Therefore, no impacts associated with this issue are anticipated to occur.

**e)** **Less than Significant Impact.** The Natural Resources and Conservation Element of the City's General Plan (City of San Bernardino 2005a) provides guidance for the preservation, use, and enhancement of natural resources. The goals and policies in this element are intended to maintain, improve, or preserve the quality and supply of the City's natural resources. In addition to these goals and policies identified in the City's General Plan, the City also has landscaping standards, which include a provision for the removal or destruction of trees. Section 19.28.090 of the City's landscaping standards states that in the event that more than five trees are proposed to be cut down, uprooted, destroyed, or removed within a 36-month period, a permit is required from the City's Department of Parks, Recreation, and Community Services. In the event that the proposed Project would result in the removal of five or more trees during construction activities, the proposed Project would apply for a tree removal permit from the City. With adherence to regulations contained within Section 19.28.090 of the City's landscaping standards, the proposed Project would not conflict with any local

[1] Only the regulatory agencies can make a final determination of the regulatory status of an aquatic feature. Should the project proponent wish to request concurrence from the agencies, a CDFW Streambed Alteration Notification and application fee ($561) would be required and a request for an approved jurisdictional determination would be required for USACE. Note that certain Right-of-Entry or Temporary Construction Easements may require that such written concurrence be provided prior to final execution.

policies or ordinances protecting biological resources. Impacts associated with this issue are anticipated to be less than significant.

**f)** **No Impact.** As identified in the Environmental Conservation Online System database for Habitat Conservation Plans (USFWS 2019), there are no adopted habitat conservation plans, natural community conservation plans, or other state habitat conservation plans that have been adopted for the Project limits. Therefore, no impact is identified for this issue area.

## 2.4.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following measures will be implemented to avoid or minimize the biological impacts as a result of the proposed Project.

**BIO-1** **Nesting Birds.** To avoid impacts to nesting birds, any native vegetation removal or tree (native or exotic) trimming activities will occur outside of the nesting bird season. In the event that vegetation clearing is necessary during the nesting season (i.e., February 15–August 31), a contractor supplied, qualified biologist will conduct a pre-construction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer should be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active.

**BIO-2** **Environmental Sensitive Areas.** Non-impacted CBS and CBS (Disturbed) habitat that is outside the Project limits will be identified as an ESA. Prior to construction, exclusionary fencing will be installed around all ESAs, under supervision of a biologist familiar with the biological resources in the BSA, to prevent accidental encroachment into these areas.

**BIO-3** **Weed Abatement.** A weed abatement program will be developed and implemented by SBCTA in order to minimize the importation of non-native plant material during and after construction. Eradication strategies will be employed should an invasion occur.

**BIO-4** **Fire Season.** When work is conducted during the fire season (as identified by the San Bernardino County Fire Authority) adjacent to any vegetation, appropriate firefighting equipment (e.g., extinguishers, shovels, and water tankers) will be available on site during all phases of Project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise the construction contractors regarding fire risk from all construction-related activities.

**BIO–5** **California Gnatcatcher Breeding Season.** Should construction be initiated during the coastal CAGN breeding season (February 15–August 31), 3 separate days of preconstruction nesting surveys will be conducted within 7 days of construction. Should breeding CAGN be identified within 500 feet of the Project, Project activities will not be allowed within 500 feet of the active nest, and additional noise measures will be implemented, as needed, to maintain noise levels of less

than 60 dBA Leq at the nest location. Section 7 consultation will be initiated with the USFWS prior to conducting project activities within 500 feet of the active nest.

**BIO–6** **Burrowing Owl Preconstruction Survey.** A preconstruction survey for BUOW will be conducted by a contractor supplied, qualified biologist within 30-days prior to vegetation clearing/grading. If BUOW are found within 200 meters of Project limits during the preconstruction survey, the biologist will determine appropriate measures necessary to ensure there is no take of active BUOW nests and CDFW conservation requirements with regards to BUOW are met.

**BIO-7** **Burrowing Owl Preconstruction Survey Guidelines.** A qualified bat biologist familiar with crevice dwelling bat and bird species will survey I-215 over University Parkway Bridge in June, prior to construction, to assess the potential for the bridge's use for bat roosting, bat maternity roosting, and bird roosting/nesting because maternity roosts and nests are generally formed in the spring. The qualified bat biologist will also perform preconstruction surveys within 2 weeks prior to construction because bat and bird roosts can change seasonally. These surveys will include a combination of structure inspections, exit counts, and acoustic surveys.

**BIO-8** **Bat Management Plan.** If a roost is detected, a bat management plan will be prepared if it is determined that Project activities would result in impacts to roosting bats. The bat management plan will be submitted for CDFW approval prior to implementation and will include appropriate avoidance and minimization efforts such as:

- **Daytime Work Hours.** All work conducted under the I-215 bridge will occur during the day. If this is not feasible, lighting and noise will be directed away from night roosting and foraging areas.

- **Reduced use of Combustion Equipment.** Construction personnel will avoid parking construction-related combustion equipment (such as generators, pumps, and vehicles) under the I-215 bridge to the fullest extent possible. Construction activities will avoid severely restricting airspace access to the roosts.

- **Temporary Exclusion.** If recommended by the qualified bat biologist, to avoid indirect disturbance of bats and birds while roosting in areas that would be adjacent to construction activities, any portion of the structure that is deemed by a qualified bat biologist to have potential bat or bird roosting habitat and may be affected by the proposed Project will have temporary bat and bird eviction and exclusion devices installed under the supervision of a qualified and permitted bat biologist prior to the initiation of construction activities. Eviction and subsequent exclusion will be conducted during the fall (September or October) to avoid trapping flightless young bats inside during the summer months or hibernating/overwintering individuals during the winter. Such exclusion efforts are dependent on weather conditions, take a minimum of 2 weeks to implement, and must be continued to keep the structures free of bats and birds until the completion of construction. All eviction and/or exclusion techniques will be coordinated between the qualified bat biologist and the

appropriate resource agencies (e.g., CDFW) if the structure is occupied by bats.

**BIO–9** **Nest Removal.** In order to avoid impacts to bridge- and crevice-nesting birds (i.e., swifts and swallows), all work on existing bridges with potential habitat that is conducted between February 15 and August 31 will include the removal of all bird nests prior to February 1 of that year to construction under the guidance and observation of a contractor supplied, qualified biologist. Removal of swallow nests that are under construction will be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by a contractor supplied, qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or the completion of construction. All nest exclusion techniques will be coordinated between the Caltrans District Biologist, CDFW, and USFWS, if applicable.

## 2.5 Cultural Resources

| **CULTURAL RESOURCES**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource as pursuant to in §15064.5? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | ☐ | ☐ | ☐ | ☒ |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | ☐ | ☐ | ☐ | ☒ |

### 2.5.1 Discussion of Environmental Evaluation Question 2.5 – Cultural Resources

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Historic Property Survey Report* (HPSR), *Historic Records Evaluation Report* (HRER), and *Archaeological Survey Report* (ASR) (Caltrans 2019a). Caltrans uses a single process to fulfill both its National Historic Preservation Act (NHPA) Section 106 and CEQA responsibilities.

As discussed in the HPSR and associated documents, Caltrans followed the standard industry practice for cultural resource identification and impact analysis as outlined in the Caltrans Standard Environmental Reference (SER) Volume II. This process involved establishing an Area of Potential Effects (APE) for the Project, conducting background research, performing a cultural resources record search at the California Historical Resources Information System (CHRIS) Information Center, conducting a sacred lands file search through the NAHC, consultation with associated Native American tribes and individuals, and conducting intensive pedestrian field surveys.

For purposes of this section, the area of analysis to determine cultural resource impacts is defined as the APE. The APE is defined as the area encompassing the work limits proposed by SBCTA within the existing ROW, the two driveway relocations off University Avenue, the vacant lot located in the southwest portion of the APE, areas of construction, re-striping and marking, construction signage, temporary construction easements, and areas where there is the potential to indirectly affect cultural resources. The APE has been included in Appendix H, Maps.

**a)** **No Impact.** Historic structures and sites are defined by local, state, and federal criteria. A site or structure may be historically significant if it is locally protected through a local general plan or historic preservation ordinance. The State of California, through the State Historic Preservation Office (SHPO), also maintains an inventory of those sites and structures that are considered to be historically significant known as the California Register of Historic Resources (CRHR). Finally, the U.S. Department of Interior has established specific guidelines and criteria that indicates the manner in which a site, structure, or district is to be defined as having historic significance and in the determination of its eligibility for listing on the National Register of Historic Places (NRHP). A property may be historic if it is old enough to be considered historic

(generally considered to be at least 50 years old and appearing the way it did in the past).

A cultural records search and a cultural resource pedestrian survey were conducted for the proposed Project. The cultural resources records search and literature review was conducted by South Central Coastal Information Center (SCCIC) staff on August 23, 2017. This records search included the identification of previous cultural resource projects and resources located within the APE, as well as within a 1-mile buffer around the APE.

Results of the records search indicate there are 2 known archaeological resources and 13 historic resources within 1 mile of the APE. The two known archaeological resources include one historic-period site (concrete valve box) and one prehistoric isolated artifact (biface core tool). The 13 built-environment resources are largely composed of single family residences, the Atchison, Topeka, and Santa Fe (AT&SF) Railroad, U.S. Highway 66, Kramer-Victorville Transmission Line, and the Culligan Zeolite Company Plant Site. Of the 13 cultural resources identified within 1 mile of the APE, 1 built-environment resource, the Kramer-Victorville Transmission Line, crosses over the southern portion of the APE and is eligible for listing on the NRHP. However, the structures supporting the transmission line are not within the APE, and the transmission lines cross above the vertical limits of the APE. Therefore, no previously recorded cultural resources are within the Project APE.

During the architectural history survey conducted on May 3, 2018, one resource was identified and recorded within the APE. The resource identified is the Scottish Rite of Freemasonry Temple located at 4400 Varsity Avenue. This resource was evaluated to determine its eligibility for listing in the NRHP and the CRHR. In order to be eligible for listing on the NRHP and the CRHR, the resource must meet at least one of the eligibility criteria as follows:

- **Criterion A:** Is the resource associated with important events in local, state, or national history?
- **Criterion B:** Is the resource associated with lives of significant persons in our past?
- **Criterion C:** Does the resource embody the distinctive characteristics of a type, period, or method of construction?
- **Criterion D:** Has the resource yielded or may likely to yield, information important in history or prehistory?

As identified in the HRER, the San Bernardino Scottish Rite of Freemasonry temple building was constructed in 1970. The building is associated with the development of the Scottish Rite of Freemasonry in Southern California in the twentieth century; however, there are other temples that better represent this organization and their mission including the temples in Pasadena, Long Beach, and Los Angeles. The resource does not convey the mission and history of the Scottish Rite of Freemasonry, as well as other temples in Southern California and is not eligible under Criterion A. The resource is not associated with any significant person(s); therefore, the resource does not meet Criterion B.

While the building features some classical revival design elements, the building in general does not represent the classical revival style due to its lack of other classical details. While it was designed by the prominent local engineering company, Joseph

Bonadiman & Associates, Inc., the building is not exemplary of the company's work. The temple at 4400North Varsity Avenue was designed by a single engineer within the company, Jerome Armstrong. Armstrong is not known as a prominent engineer. The company's exemplary and large scale work is better conveyed by the mid-century modern architecture at Ontario International Airport and Edwards Air Force Base, which were designed by a team of engineers within Joseph Bonadiman & Associates, Inc. Therefore, the building does not embody the distinctive characteristics of a type, period, or method of construction and does not meet Criterion C.

Under Criterion D, the building has not yielded, nor is it likely to yield, information important to the study of local, state, or national history. Based on the information contained in the HRER, the building is not eligible for listing in the NRHP or the CRHR and is not a historical resource for the purpose of CEQA.

Other features within the APE considered included the I-215 bridge structure over University Parkway and the Kramer-Victor Transmission Line. Both University Parkway and I-215 appear to have been constructed in the late 1950s or early 1960s. Although these roads are more than 30 years old, the intensive survey indicates that the structures have been substantially altered, and they appear to be modern roadways that are regularly maintained. As such, they are not considered cultural resources. In addition, according to the Caltrans Historic Bridge Inventory, the I-215 bridge structure was not identified as historic and is not eligible for listing in the NRHP or the CRHR. As previously identified, the Kramer-Victor Transmission Line was identified as crossing over the APE and is eligible for listing on the NRHP. However, the structures supporting the transmission line are not within the APE and the lines themselves cross high above the vertical limits of the APE. All new above-ground structures (i.e., traffic signal poles and overhead signage) proposed as part of the Project would be consistent in height with existing poles and signage currently within the ROW and would not exceed 36 feet in height. As no resources within the APE would be considered eligible for listing in the NRHP or the CRHR, no impacts associated with this issue are anticipated to occur, and no mitigation measures are required.

**b)** **No Impact.** An intensive archaeological survey of the APE was completed on October 5, 2017, and May 3, 2018. In addition, a reconnaissance-level architectural field survey of the APE was conducted on May 3, 2018. Most of the Project's APE is disturbed by extensive mechanical alteration, which has introduced fill sediments. Other areas of the ground surface were obscured by hardscape that includes curbs and sidewalks, paved roadways, and parking lots and landscaping associated with adjacent businesses. Narrow strips of native sediments were observed along the eastern ROW of the northbound on- and off-ramps, along the western ROW of the southbound on- and off-ramps, and within the vacant lot located in the southwest portion of the APE.

During field work, the archaeological surveyor also attempted to re-identify the one cultural resource (CA-SBR-10316H) that had been previously recorded within the APE, as well as assess the condition of two roadways (University Parkway and I-215) depicted on historic maps and aerial photographs.

Ground surface visibility within open areas (i.e., not covered with hardscape) was approximately 50 percent due to grassy cover. As a result of these disturbances, there is little to no potential for intact subsurface cultural deposits.

Results of the records search indicate that only one archaeological site has been identified within 1 mile of the APE despite extensive survey coverage in the area. The general lack of archaeological resources in this area may be due to its proximity to the Cajon Wash and Cajon Canyon to the north and higher magnitude fluvial processes that may have scoured away archaeological deposits. Report findings indicate that the general sensitivity of the area to contain cultural resources is relatively low. Furthermore, results of the survey indicate that surficial deposits within the APE have been disturbed by road and interstate construction and commercial development. It is anticipated that ground-disturbing activities associated with the Project will largely be confined to these previously disturbed sediments. As such, the possibility of encountering subsurface cultural resources during construction is low.

Although, the proposed Project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to CEQA Guidelines §15064.5 or an identified tribal cultural resource pursuant to PRC §21082.3, there is a low potential for Project-related construction to impact unknown or previously unrecorded archaeological resources. For this reason, Standard Environmental Commitment Measure CUL-1 is proposed in the event that cultural resources are inadvertently encountered during excavation activities. With implementation of Standard Environmental Commitment Measure CUL-1, no impacts associated with archaeological and tribal cultural resources are anticipated to occur.

**c)** **No Impact.** There are no known burial sites or other cultural sites that may contain human remains located within the APE. Due to the lack of any indication of a formal cemetery or informal family burial plots on site, the proposed Project is not anticipated to have any impacts on known human remains. However, if human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance will occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98.

In the event that human remains (or remains that may be human) are discovered within the APE during grading or earthmoving activities, the construction contractor will immediately stop all activities in the immediate area of the find. The construction contractor will then inform the San Bernardino County Coroner, Caltrans, and SBCTA. The coroner would be permitted to examine the remains. If the coroner determines that the remains are of Native American origin, the coroner will notify the NAHC to identify the MLD. The MLD will be granted access to inspect the site of the discovery of the Native American human remains and may recommend to Caltrans and/or SBCTA means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD will complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the Project site.

The disposition of the remains would be determined in consultation with Caltrans, SBCTA, and the MLD. Caltrans and/or SBCTA would be responsible for the final decision, based upon input from the various stakeholders. If deemed appropriate, the remains would be recovered by the coroner and handled through the Coroner's Office. Coordination with the Coroner's Office would be through Caltrans and/or SBCTA and in consultation with the various stakeholders. With adherence to State Health and Safety Code Section 7050.5 and Standard Environmental Commitment Measure CUL-2, no impacts associated with this issue would occur.

### 2.5.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance and minimization measure were identified for cultural resources. However, the following Standard Environmental Commitment measures will be implemented as part of the proposed Project.

**CUL-1** **Discovery of Buried Cultural Resources.** If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work will stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

**CUL-2** **Discovery of Human Remains.** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC who will then notify the MLD. At this time, the person who discovered the remains will contact the Caltrans and/or SBCTA so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

## 2.6 Energy

| **ENERGY**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | ☐ | ☐ | ☐ | ☒ |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | ☐ | ☐ | ☐ | ☒ |

### 2.6.1 Discussion of Environmental Evaluation Question 2.6 – Energy

For purposes of this section, the area of analysis to determine energy resource impacts is defined as the Project limits.

**a)** **No Impact.** The proposed Project would result in the reconfiguration of the I-215/University Parkway Interchange, which would require construction activities including, but not limited to, asphalt and concrete removal, grubbing, cut-and-fill activities, and grading. Construction energy consumption would result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the Project limits. Aside from the use of transportation fuels for construction vehicles and equipment, construction activities would require minimal electricity consumption and would not be anticipated to have any adverse or significant impact on available electricity supplies and infrastructure. The City's noise ordinance generally restricts construction during nighttime hours, which would minimize the need for nighttime lighting. Therefore, no impacts on electricity supply and infrastructure associated with short-term construction activities would occur, and no mitigation measures are required. Natural gas is not anticipated to be consumed in any substantial quantities during construction of the proposed Project. Therefore, no Project impacts on energy and gas associated with construction activities are anticipated.

Operation of the proposed Project would not result in changes to the existing land use (e.g. transportation facility) within the Project limits and is not anticipated to increase the demand for electricity or natural resources. Therefore, no impacts on energy and gas are anticipated with operation of the proposed Project, and no mitigation measures are required.

**b)** **No Impact.** The proposed Project is a transportation project that would improve an existing interchange. The proposed Project does not propose any new structures that would subject to the goals and polices of the City's General Plan Energy and Conservation Element (City of San Bernardino 2005a) specific to development and new construction of buildings. Although the proposed Project may result in additional traffic and crossing signals, the use of energy would be so minimal as to not impact the City's energy resources. In addition, the proposed Project would support regional and statewide efforts to improve transportation energy efficiency and reduce

transportation energy consumption with respect to private automobiles. The proposed Project would be consistent with and support the goals and benefits of the SCAG 2016 RTP/SCS, which seeks to maximize mobility and accessibility for all people and goods in the region. Therefore, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact is identified for this issue area, and no mitigation measures are required.

### 2.6.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for energy resources.

## 2.7 Geology and Soils

| **GEOLOGY AND SOILS**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? | ☐ | ☐ | ☐ | ☒ |
| ii. Strong seismic ground shaking? | ☐ | ☐ | ☒ | ☐ |
| iii. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ☐ | ☒ |
| iv. Landslides? | ☐ | ☐ | ☒ | ☐ |
| b) Result in substantial soil erosion or the loss of topsoil? | ☐ | ☐ | ☒ | ☐ |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | ☐ | ☐ | ☐ | ☒ |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | ☐ | ☐ | ☐ | ☒ |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ☐ | ☐ | ☒ |

### 2.7.1 Discussion of Environmental Evaluation Question 2.7 – Geology and Soils

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Paleontological Identification Report/Paleontological Evaluation Report* (Caltrans 2018e). For purposes of this section, the area of analysis to determine paleontological resource impacts is defined as the Project limits.

**a i)** **No Impact.** The proposed Project is not within or adjacent to an Alquist-Priolo Earthquake Fault Zone, and there are no active faults located on or adjacent to the Project limits. In addition, the proposed Project is a transportation project that would not increase population or result in the construction of new habitable structures. Therefore, no impact is anticipated with regards to potentially exposing expose people or structures to adverse effects from ground rupture, and no mitigation measures are required.

**a ii)** **Less than Significant Impact.** The proposed Project is located within an active seismic region and could experience strong seismic ground shaking. According to the City's General Plan Safety Element (City of San Bernardino 2005a), several active faults are located within 2 miles of the Project limits, including the San Andreas Fault (approximately 1.7 mile to the north), the San Jacinto Fault (approximately 1.7 mile to the south) and the Glen Helen Fault (approximately 1.5 mile to the south). The area within the Project limits has been and will continue to be directly affected by seismic activity to some degree; however, no habitable structures would be constructed as part of the Project that would be susceptible to secondary hazards that may impact local residents. Construction of the proposed Project would be completed in accordance with Caltrans' standard specifications and procedures regarding seismic design that take into account seismic conditions within the Project limits and surrounding area. Given that active faults are not on or adjacent to the Project limits, it can be concluded that the area within the Project limits would not be affected by ground shaking more than any other area is seismically active Southern California. Impacts associated with this issue area are considered to be less than significant, and no mitigation measures are required.

**a iii)** **No Impact.** Liquefaction is the sudden and temporary loss of soil strength in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. According to Figure S-5: Liquefaction Susceptibility of the City's General Plan (City of San Bernardino 2005a), the Project is not located in an area with the potential for liquefaction. Therefore, the proposed Project would not expose people or structures to liquefaction, and no impact is identified for this issue area.

**a iv)** **Less than Significant Impact.** Landslide hazards are related to both slope and seismic activity. According to the Safety Element of the City's General Plan (City of San Bernardino 2005a), the northern portion of the Project limits is identified as being within an area of low to moderate generalized landslide susceptibility. Although the majority of the Project limits are generally flat, the proposed Project would require minor re-grading of existing slopes along the I-215 on- and off- ramps. However, the minor re-grading of the existing slopes along the I-215 on- and off- ramps would occur outside of the landslide hazard area identified by the City. All grading and slope alterations would be conducted consistent with Caltrans' standards regarding compacting and stabilization practices. Impacts associated with this issue are anticipated to be less than significant, and no mitigation measures are required.

**b)** **Less than Significant Impact.** Construction of the proposed Project would include the removal of limited existing vegetation from the Project limits, which would expose soil to wind or water erosion temporarily. These impacts would be temporary and confined to the excavation areas. A SWPPP would be implemented that identifies specific applicable construction BMP to control erosion. Once construction is completed, design pollution prevention BMPs, such as slope/surface protection systems, would be implemented to prevent soil erosion. A less than significant impact is identified for this issue area, and no mitigation measures are required.

**c)** **No Impact.** As shown in the City's General Plan (City of San Bernardino 2005a), Figure S-5: Liquefaction Susceptibility and Figure S-6: Potential Subsidence Areas, the proposed Project is not located within an area with the potential for liquefaction or ground subsidence. No impact is identified for this issue area, and no mitigation measures are required.

**d)** **No Impact.** Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated changes in the moisture content. The ability of clayey soil to change volume can result in uplift or cracking to foundation elements or other rigid structures, such as slabs, rigid pavements, sidewalks, or other hardscape constructed on these soils. According to the Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2019), soils within the Project limits consist of the following soil types: Friant-Rock outcrop complex (Fr), Handford coarse sandy loam, 9 to 15 percent slopes (HaD), Tujunga loamy sand, 0 to 5 percent slops (TuB), and Tujunga gravelly loamy sand, 0 to 9 percent slopes (TvC). Clayey soils within the Project limits were not identified in the soil mapping program. In addition, the proposed Project would be designed according to the Uniform Building Code, to prevent structural damage from soil expansion and contraction. No impact is identified for this issue area, and no mitigation measures are required.

**e)** **No Impact.** The proposed Project would result in the reconfiguration of the I-215/University Parkway interchange and require construction activities including, but not limited to, asphalt and concrete removal, grubbing, cut-and-fill activities, and grading. During construction, portable toilets would be used by the construction workers. These portable toilets would be emptied by a waste disposal company and hauled away to an approved waste disposal facility. Once construction is completed, the portable toilets would be removed from the Project limits. As the proposed Project is an interchange improvement project, operation of the proposed Project would not require or include the use of septic tanks or waste water disposal systems. Therefore, no impacts associated with this issue area would occur, and no mitigation measures are required.

**f)** **No Impact.** A Combined Paleontological Identification Report/Paleontological Evaluation Report (PIR/PER) was prepared for the proposed Project (Caltrans 2018e). According to the PIR/PER, the Quaternary alluvial deposits within the Project limits has a low paleontological sensitivity between 0 to 5 feet bgs and a high paleontological sensitivity at depths greater than 5 feet bgs. Construction of the proposed Project improvements would mostly require surface ground disturbance activities and would primarily be restricted to areas of previously disturbed areas. However, the proposed Project would require excavation activities of up to 15 feet bgs to install traffic signal poles and overhead signage foundations. Because the proposed Project would require excavation activities up to 15 feet, there is the potential for nonrenewable paleontological resources to be impacted during construction activities. With

implementation of Standard Environmental Commitment Measures PAL-1 through PAL-3, no impacts on paleontological resources are anticipated to occur.

### 2.7.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance and minimization measures were identified for paleontological resources. However, the following Standard Environmental Commitment measures will be implemented as part of the proposed Project.

**PAL-1** **Environmental Awareness Training.** Prior to the start of construction, SBCTA will ensure all field personnel be briefed regarding the types of fossils that could be found in the Project limits and the procedures to follow should paleontological resources be encountered. This training should be accomplished at the pre-grade kick-off meeting or morning tailboard meeting and should be conducted by the Project paleontologist or his/her representative. Specifically, the training should provide a description of the fossil resources that may be encountered in the Project limits, outline steps to follow in the event that a fossil discovery is made, and provide contact information for the Project paleontologist and on-site monitor(s). The training should be developed by the Project paleontologist and may be conducted concurrent with other environmental training (e.g., cultural and natural resources awareness training, safety training, etc.).

**PAL-2** **Paleontological Mitigation Monitoring.** Prior to the commencement of ground-disturbing activities, SBCTA will ensure that a qualified professional paleontologist be retained to prepare and implement a paleontological monitoring plan for the Project. Part-time monitoring is recommended for grading and excavation activities at depths greater than 5 feet bgs that will disturb previously undisturbed Qya. Due to soil development, previous anthropogenic developments, and young age of surficial soil and native Quaternary surficial sediments, monitoring should not be required in Project limits where construction activities disturb sediments at depths less than 5 feet bgs. Monitoring should entail the visual inspection of excavated or graded areas and trench sidewalls.

- In the event that an inadvertent fossil discovery is encountered during construction, all work will cease within a 20-foot radius of the discovery. On-site personnel will contact the construction superintendent and the Caltrans PRS immediately.

- In the event that an inadvertent fossil discovery is encountered during construction, SBCTA will ensure that the Caltrans PRS will examine the discovery to assess it for scientific significance and determine if any paleontological resources mitigation is warranted, including monitoring, preservation in place, excavation, documentation, curation, or other appropriate measures.

- In the event that an inadvertent fossil discovery is encountered during construction, and if the Caltrans PRS determines the find is scientifically significant and mitigation is warranted, SBCTA will ensure that a qualified professional paleontologist be retained. Steps will be taken to protect against looting, erosion, or other human or natural damage while the fossil locality is exposed.

**PAL-3** **Fossil Preparation, Curation, and Reporting.** Upon completion of fieldwork, all significant fossils collected should be prepared in a properly equipped paleontology laboratory to a point ready for curation. Preparation will include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Following laboratory work, all fossils specimens should be identified to the lowest taxonomic level, cataloged, analyzed, and delivered to the Natural History Museum of Los Angeles County for permanent curation and storage. The cost of curation is assessed by the repository and is the responsibility of SBCTA.

At the conclusion of laboratory work and museum curation, a final paleontological mitigation report should be prepared describing the results of the paleontological mitigation monitoring efforts associated with the Project. The report should include a summary of the field and laboratory methods, an overview of the Project limits geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, a copy of the report should also be submitted to the Natural History Museum of Los Angeles County.

## 2.8 Greenhouse Gas Emissions

| **GREENHOUSE GAS EMISSIONS:** Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | ☐ | ☐ | ☒ | ☐ |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | ☐ | ☐ | ☒ | ☐ |

### 2.8.1 Discussion of Environmental Evaluation Question 2.8 – Greenhouse Gas Emissions

Chapter 3 of this document describes, calculates, and estimates the amount of greenhouse gas emissions that may occur related to the proposed Project. While the proposed project will result in greenhouse gas (GHG) emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

### 2.8.2 Avoidance, Minimization, and/or Mitigation Measures

Additional avoidance and minimization measures, to address potential short-term and long-term Project-specific GHG emissions and impacts on climate change under CEQA, include:

**GHG-1** **Truck Idling.** During construction, SBCTA will ensure that idling will be limited to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

**GHG-2** **Truck Trips.** During construction, SBCTA will ensure that truck trips are scheduled outside of peak morning and evening commute hours.

**GHG-3** **Recycled Materials.** During construction, SBCTA will ensure that construction waste is minimized and the use of recycled materials maximized; which reduces consumption of raw materials, reduces landfill waste, and encourages cost savings.

**GHG-4** **Potable Water.** During construction, SBCTA will ensure that measures to reduce consumption of potable water will be incorporated.

**GHG-5** **On-Site Recycled Materials.** During construction, SBCTA will ensure that on-site recycling of existing project features is encouraged, such as Metal Beam Guard

Railing, light standards, sub-base granular material, or native material that meets Caltrans specifications for incorporation into new work.

**GHG-6** **Limit Transport of Earthen Materials.** During construction, SBCTA will ensure that construction waste is minimized and the use of recycled materials maximized; which reduces consumption of raw materials, reduces landfill waste, and encourages cost savings.

**GHG-7** **Reduce Electric Lighting.** During construction, SBCTA will ensure that the need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights is reduced.

**GHG-8** **Improve Energy Efficiency.** SBCTA will ensure that measures are incorporated to improve energy efficiency will be implemented as part of the Project.

**GHG-9** **Improve Water Efficiency.** SBCTA will ensure that measures to improve water efficiency (including but not limited to landscaping and building operations) will be implemented as part of the Project.

**GHG-10** **Complete Streets.** SBCTA will ensure that Complete Streets components are implemented as part of the Project.

**GHG-11** **Solar Powered Highway Facility Components.** SBCTA will ensure that installation of solar to supply power to highway facility components or buildings will be implemented as part of the Project.

**GHG-12** **Native Landscaping.** SBCTA will ensure that native plants and vegetation (replacing more vegetation than was removed) will be integrated into the project design to increase carbon sequestration.

**GHG-13** **Green Infrastructure.** SBCTA will ensure that green infrastructure (planted areas) instead of gray (concrete) storm water facilities, will be implemented as part of the Project.

**GHG-14** **Increased Life-Span Pavement Materials.** SBCTA will ensure the design and installation of long-life pavement structures to minimize life-cycle costs. Consider future climate conditions in decisions. For example, areas that are expected to experience increased temperatures and extreme heat days may have different pavement needs than areas expecting more frequent freezing temperatures.

## 2.9 Hazards and Hazardous Materials

| **HAZARDS AND HAZARDOUS MATERIALS:** Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | ☐ | ☐ | ☒ | ☐ |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | ☐ | ☐ | ☒ | ☐ |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | ☐ | ☐ | ☐ | ☒ |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ☒ |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | ☐ | ☐ | ☐ | ☒ |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? | ☐ | ☐ | ☒ | ☐ |

### 2.9.1 Discussion of Environmental Evaluation Question 2.9 – Hazards and Hazardous Materials

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Initial Site Assessment Report* (ISA) (Caltrans 2018a) and *I-215/University Parkway Interchange Improvement Project Aerially Deposited Lead Site Investigation* (Caltrans 2019b).

The ISA included an environmental database search; review of historical land use records (Sanborn fire insurance maps, aerials, and topographic maps), city directories, and public agency records; and site reconnaissance. For purposes of this section, the area of analysis to determine hazards or hazardous materials impacts is defined as the Project limits.

**a)** **Less than Significant Impact**. Hazardous materials and wastes that would be used or generated during construction of the proposed Project are considered to pose a potential short-term construction impact. Construction-related hazardous materials likely to be used include lubricants (both grease and oils), petroleum fuels, cleaning solvents, and paint. The proposed Project would be required to comply with federal, state, and local regulations for the routine transport, use, and disposal of any hazardous materials. These regulations include the Resource Conservation and Recovery Act (RCRA); U.S. Department of Transportation (DOT) Hazardous Materials Regulations (Code of Federal Regulations [CFR] Title 29); and the California Health and Safety Code, in combination with construction BMPs that would be implemented during Project construction. Any accidental release of these materials due to spills or leaks would be cleaned up in the normal course of business, consistent with the above mentioned regulations. Once construction is completed, operations would remain similar to existing conditions (e.g., transportation facility). Therefore, impacts associated with the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant, and no mitigation measures would be required.

**b)** **Less than Significant Impact.** The ISA (Caltrans 2018a) identified four hazardous conditions of concern that may be present within portions of the Project limits. These conditions of concern are aerially deposited lead (ADL), asbestos-containing material (ACM), lead based paint, and thermoplastic striping.

Due to historic use of lead in gasoline, lead may exist in soils near heavily traveled roadways, such as I-215. The presence of ADL in soils does not necessarily pose a threat, but it is considered to have the potential to impact the environment and workers on site, as well as affect disposal methods if ADL soils cannot be reused and must be moved off site. Based on the information contained in the ISA (Caltrans 2018a), it is assumed that the previously undisturbed soil areas and/or unpaved areas within Caltrans ROW along the shoulders of I-215 have the potential to contain ADL. Due to the potential of ADL soils within the Project limits, an ADL Site Investigation (Caltrans 2019b) was conducted. The area within the Project limits was divided into two soil testing units consisting of northbound and southbound segments. The ADL Site Investigation concluded that although ADL was present in the soil samples, soil generated from excavation depths up to 3 feet bgs would not be considered hazardous soil. The ADL Site Investigation also concluded that based on the sampling results, soils generated from excavation activities within the Project limits are considered to be Caltrans soil type ‘X’ with a non-hazardous waste classification and is acceptable for reuse. As such, surplus soil classified as non-hazardous can be disposed of as non-hazardous waste at a Class III landfill or exported for reuse elsewhere in accordance with the destination’s waste acceptable policy; the 2016 Caltrans Lead Agreement with DTSC; and federal, state, and local regulations and requirements. To ensure that excavated ADL soil is handled properly, Minimization Measure HAZ-5 is proposed for the Project. Adherence to Minimization Measure HAZ-5 would ensure impacts associated with this issue are a less than significant impact level, and no mitigation measures are required.

Asbestos was used in many building materials prior to 1978 and may have been used up until the early 1980s in expansion joint materials for bridges, asphalt, concrete, and other building materials. ACM is of primary concern when it is friable (e.g., material that can be easily crumbled). During demolition activities, ACM is considered to have the potential to impact the environment and workers on site as, well as affect disposal methods if the asbestos fibers become airborne. The ISA (Caltrans 2018a) identifies that the I-215 bridge was built in 1956 and may contain ACM. However, the proposed Project improvements would not require the demolition or disturbance of the I-215 bridge. In the event that ACM is encountered, Minimization Measures HAZ-2 and HAZ-4 would ensure impacts are at a less than significant level.

Prior to 1978, lead-based paint may have been used in construction or maintenance of building and road structures, including bridges. Lead-based paint is considered to have the potential to impact the environment and workers on site, as well as affect disposal methods. The ISA (Caltrans 2018a) identifies that the I-215 bridge was built in 1956 and may contain lead-based paint. However, the proposed Project improvements would not require the demolition or disturbance of the I-215 bridge. In addition, in the event that lead-based paint is encountered, implementation of Minimization Measures HAZ-4 and HAZ-5 would ensure impacts remain at a less than significant level.

Similar to the use of lead paint, chrome yellow (containing lead chromate) was used as the primary yellow pigment in traffic lane paints and thermoplastic striping. In California, lead chromate traffic striping was phased out of traffic paint between 1997 and 2000 and from thermoplastic striping by 2004. The concentrations of lead chromate in the traffic lane paints and thermoplastic striping applied to roadways would be considered hazardous waste. Based on information contained in the ISA (Caltrans 2018a), yellow paint used for lane striping and pavement marking along I-215 within the Caltrans ROW may contain lead chromate. During construction activities under the proposed Project, lead chromate is considered to have the potential to impact the environment and workers on site, as well as affect disposal methods. In the event that lead chromate is present within the Project limits and removal required as part of construction activities, Minimization Measures HAZ-1 through HAZ-7 are proposed for the Project. Adherence to Minimization Measures HAZ-1 through HAZ-7 would ensure impacts associated with this issue are at a less than significant level.

Other sources of hazardous waste/materials may be encountered during construction of the proposed Project. These may include previously unknown sources of contamination, such as underground storage tanks, contaminated soils, and groundwater. In the event that these hazardous waste/materials are encountered, Minimization Measures HAZ-1 through HAZ-7 would be implemented to minimize the potential for hazardous waste/materials to be exposed to the public or environment. Implementation of Minimization Measures HAZ-1 through HAZ-7 would ensure these potential impacts are at a less than significant level.

**c)** **No Impact.** No existing schools have been identified within 0.25 mile of the Project limits. The nearest school to the Project limits is Carmack Elementary School, which is located approximately 1,583 feet (0.30 mile) northeast. As such, implementation of the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school Therefore, impacts would be less than significant, and no mitigation measures would be required.

**d)** **No Impact.** As identified in the ISA (Caltrans 2018a), the proposed Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, also known as the Hazardous Waste and Substances Sites (Cortese) List. Although the ISA did not identify the area within the Project limits as being listed on the Cortese List, the ISA did identify three hazardous waste/materials sites associated with the proposed Project due to ROW requirements, but these three sites would not pose a concern to the proposed Project, as described below.

- Scottish Rite of Freemasonry located at 4400 North Varsity Avenue, San Bernardino, California. This site was previously operated by AT&T Mobility #88486 and was assigned a permit to operate as a hazmat handler. However, the site is currently operated by Scottish Rite of Freemasonry as an education learning facility and banquet/event rental facility. There is no evidence to suggest a release of hazardous substances from the past and current uses of the site.
- Newmark Ground Water Contamination located at Bunker Hill Ground Water Basin, San Bernardino, California. This site currently has groundwater contamination. Depth to contaminated groundwater at this site is estimated to be greater than 100 feet bgs. Although evidence exists to suggest a release of hazardous substances associated with past uses at this site, the proposed Project would not affect or come in contact with hazardous substances associated with the Newmark Ground Water Contamination site as Project excavation would not exceed the depth of 15 feet bgs.
- Shell Service Station (now Mobil) located at 3909 Hallmark Parkway, San Bernardino California. This site previously had an open case in 2007 for soil contamination surrounding the fuel dispenser canopy and the storage area of the underground storage tanks at a maximum depth of 55 feet bgs. Groundwater was not encountered during site investigations and was estimated to occur at 185 feet bgs. A case closure was granted in 2010. The Project would not encounter contamination associated with this property, as soil contamination was limited to the area surrounding the fuel dispenser canopy and underground storage tanks and not within the disturbance limits.

Given that the proposed Project would not be impacted by or impact an existing site that is included on a list of hazardous materials sites, no impacts associated with this issue area are anticipated to occur, and no mitigation measures are required.

**e)** **No Impact.** The closest public airport or public use airport is the San Bernardino International Airport, located approximately 6.5 miles southeast of the proposed Project. As shown in Figure LU-4 - San Bernardino International Airport Planning Boundaries in the City's General Plan (City of San Bernardino 2005a), the Project is located outside of the airport influence area boundary for the San Bernardino International Airport. Construction or operation of the proposed Project would not result in an airport safety hazard in the Project limits. No impact is identified for this issue area, and no mitigation measures are required.

**f)** **Less Than Significant Impact.** Implementation of the proposed Project would result in improvements being made at the I-215/University Parkway interchange. During construction of the proposed Project, temporary impacts on vehicular flow and traffic may occur. To ensure that construction of the proposed Project would not physically interfere with the City's adopted emergency response plan, Minimization Measure TR-1 is proposed. Minimization Measure TR-1 requires the preparation and

implementation of a TMP and would consider construction and alternative route strategies in the event that portions of roadways within the Project limits are restricted during certain construction activities. In addition, the proposed Project would comply with the City of San Bernardino's Emergency Operations Plan, which addresses extraordinary emergency situations. All emergency procedures would be consistent with local, state, and federal guidelines during construction and operation of the proposed Project. Impacts associated with this issue area would be less than significant.

**g)** **Less Than Significant Impact.** As shown in Figure S-9 – Fire Hazard Area in the City's General Plan (City of San Bernardino 2005a), the Project is not within a fire hazard area. However, portions of the southern Project limits are adjacent to an area identified as an extreme fire hazard area by the City. Due to the nature of construction activities that may occur (e.g., use of grinding, welding, and other spark-inducing activities) adjacent to areas with vegetation, there is the potential for exposure of people or structures to a wildland fire event under the proposed Project. However, this potential is minimized when Measure BIO-4 is incorporated. Minimization Measure BIO-4 requires coordination with the San Bernardino County Fire Authority during the fire season when construction activities are being conducted adjacent to any vegetation in the area. The minimization measure also requires the use of shields, protective mats, and other fire preventive methods during grinding, welding, and other spark-inducing construction activities. With implementation of the Minimization Measure BIO-4, impacts associated with this issue would be a less than significant.

## 2.9.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following measures will be implemented to avoid or minimize the hazard and hazardous waste impacts as a result of the proposed Project.

**HAZ-1** **Caltrans Standard Specifications, Section 14 11.12.** During construction, SBCTA will ensure that sampling, analysis, removal, and disposal of any traffic striping and pavement materials will be done in accordance with Construction Program Procedure Bulletin 99-2 and the Caltrans Standard Specifications, Section 14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue and Section 36-4 Residue Containing Lead from Paint and Thermoplastic (2015), and be consistent with the requirements within Caltrans Construction Manual, Chapter 7-107E Removing Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue (2017). Before disposal, the contractor is required to sample the removed material for proper waste classification. Yellow traffic stripe and pavement marking that is characterized as hazardous waste require disposal to a DTSC permitted Class I disposal facility.

**HAZ-2** **Construction Health and Safety Plan.** Prior to construction, SBCTA will ensure that a health and safety plan to guide all construction activities is developed. A certified industrial hygienist will prepare this plan based on evaluations of proposed construction activities, the potential hazards identified in this report, and any future assessment prepared for the Project. This plan would contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties. The plan would meet the requirements of 29 CFR 1910 and 1926 and all other applicable federal, state, and local regulations

and requirements. The designated contractor would be responsible for preparing the health and safety plan before start of construction.

**HAZ-3** **Construction Contaminant Management Plan.** Prior to construction, SBCTA will ensure that a soils and groundwater contaminant management plan is developed. This plan will include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials in accordance with applicable federal, state, and local regulations and requirements. The designated contractor would be responsible for preparing the contaminant management plan before start of construction.

**HAZ-4** **Construction Contingency Plan.** Prior to construction, SBCTA will ensure that a Construction Contingency Plan with guidance provided in Chapter 7-107 of the Caltrans Construction Manual for handling and dealing with unknown hazards will be developed (Appendix I for Caltrans Unknown Hazards Procedure). This plan will include provisions for responding to events such as the discovery of unidentified UST, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address UST decommissioning, field screening, and material testing methods; mitigation and contaminant management requirements; and health and safety requirements for construction workers. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified by calling 1-800-424-8802, and cleanup must be coordinated with environmental agencies. The designated contractor is responsible for preparing the construction contingency plan before start of construction.

**HAZ-5** **Lead Compliance Plan.** Prior to construction, SBCTA will ensure that a lead compliance plan is developed by a Certified Industrial Hygienist to protect workers from exposure to lead associated with yellow traffic stripe, pavement makings, and soil. The lead compliance plan will include procedures in the handling, management, sampling, and disposal of material containing yellow traffic stripe, pavement markings, and soil.

**HAZ-6** **National Pollution Discharge Elimination System Construction General Permit.** The NPDES Construction General Permit requires a construction site characterization, including a description of any pollution sources. Prior to construction, SBCTA will ensure that the designated contractor comply with the NPDES Construction General Permit by preparing and implementing a SWPPP to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMP to control the pollutants, such as sediment control, storm drain inlet protection, construction materials management, non-storm water BMPs, and provide pollution-source corrective measures. All work must conform to the construction site best management practice requirements specified in the latest edition of the *Storm Water Quality Handbooks: Construction Site Best Management Practices Manual* to control and minimize impacts of construction and construction related activities, materials, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.

**HAZ-7** **Disposal of Material in Landfills.** Prior to the start of construction, SBCTA will ensure that the designated contractor will be responsible for obtaining advanced approval from landfills to accept any impacted soil that will require disposal at an off-site landfill.

## 2.10 Hydrology and Water Quality

| **HYDROLOGY AND WATER QUALITY:** Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | ☐ | ☐ | ☒ | ☐ |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | ☐ | ☐ | ☐ | ☒ |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | | | |
| i. result in substantial erosion or siltation on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; | ☐ | ☐ | ☒ | ☐ |
| iii. create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or | ☐ | ☐ | ☒ | ☐ |
| iv. impede or redirect flood flows? | ☐ | ☐ | ☒ | ☐ |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | ☐ | ☐ | ☐ | ☒ |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | ☐ | ☐ | ☐ | ☒ |

### 2.10.1 Discussion of Environmental Evaluation Question 2.10 – Hydrology and Water Quality

The information in this section is based on from the *I-215/University Parkway Interchange Improvement Project Water Quality Technical Memorandum* (Caltrans 2018b). For purposes of this section, the area of analysis to determine hydrology and water quality impacts is defined as the Project limits.

**a)** **Less than Significant Impact.** There are federal, state, and local regulations designed to protect water quality. These regulations include the Federal Clean Water Act (CWA) and the California Porter-Cologne Water Quality Control Act. In addition, Section 13240 of the Porter-Cologne Water Quality Control Act requires each local Regional Water Quality Control Board (RWQCB) to formulate and adopt water quality control plans, or basin plans, for all areas within the region. Water quality in the Project limits and surrounding area is regulated by the Santa Ana RWQCB through the Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin (1995, last updated 2016).

The proposed Project must conform to all applicable water quality regulations and/or permit requirements of the State Water Resources Control Board (SWRCB) and any applicable local RWQCB requirements including, but not limited to:

- NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ
- NPDES Statewide Storm Water Permit Waste Discharge Requirements for the State of California, Caltrans (Order No. 2012-0011-DWQ, NPDES No. CAS00003, adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (effective April 7, 2015)
- Caltrans SWMP (July 2016)

The proposed Project would include adding paved areas; improving freeway ramps and street lighting; traffic signal modifications; minor paving; minor utility relocations; signage changes; restriping; turn lanes; and bicycle, pedestrian, and median streetscape improvements. To accommodate the proposed changes under the proposed Project, some existing drainage systems would need to be modified to contain the required design flows within the Project limits. Proposed drainage modifications may include relocation of existing systems in case of a conflict. Other modifications may include abandoning some drainage systems, or adjusting them with respect to the finished grade. When feasible, the existing drainage patterns would be maintained on the ramps and on University Parkway. The proposed drainage system would be as similar to the existing drainage systems as possible consisting of grate inlets, curb opening inlets and down drains, overside drains, and storm drain pipes.

The total disturbed soil area (DSA) for the proposed Project is estimated to be 8.08 acres and includes areas for construction, access, and staging. Potential temporary impacts on water quality that can be anticipated during construction for the proposed Project include sediments caused by the temporary access of construction equipment, excavation and grading for the new roadway, vegetation removal, concrete waste from the construction, trash from workers and construction waste, petroleum products from

construction equipment and/or vehicles, sanitary wastes from portable toilets and any other chemicals used for construction, such as coolants used for equipment and/or concrete curing compounds.

Since the proposed Project would result in a DSA greater than 1 acre, the proposed Project would be required to comply with the NPDES Construction General Permit. In addition, the proposed Project would be required to prepare and implement a SWPPP. The SWPPP would identify temporary BMPs to address the potential temporary impacts on water quality. The temporary BMPs identified in the Project SWPPP may include, but not be limited to, measures such as temporary slope reinforcement and stabilization measures (e.g., hydraulic mulch [bonded fiber mix], temporary cover), linear sediment barriers (e.g., fiber rolls, gravel bag berms), and construction site waste management (e.g., street sweeping, concrete washout), as well as temporary construction entrance and drainage inlet protection.

The proposed Project would increase the impervious area by 1.50 acre. Project elements contributing to the net impervious area increase include roadway surfaces, sidewalks, and signals and lighting. The additional impervious surface area has the potential to increase typical pollutants generated during the operation of a transportation facility (sediment/turbidity, nutrients, trash, and debris, bacteria and viruses, oxygen demanding substances, organic compounds, oil and grease, pesticides and metals). However, the proposed Project would implement post construction source control BMPs (Design Pollution Prevention BMPs), such as preservation of existing vegetation and slope/surface protection systems (permanent soil stabilization), as well as concentrated flow conveyance systems such as concrete ditches, oversize drains, inlets, down drains, and storm drain pipes. These Design Pollution Prevention BMPs would help control runoff and prevent soil erosion and sedimentation caused by concentrated flows of runoff.

The proposed Project would also include treatment BMPs or permanent BMPs to treat storm water runoff collected from the new impervious surfaces areas, which may include two bio-swales and two bio-strips. The treatment BMPs would include maintenance accessibility through the implementation of maintenance vehicle pullouts at each location. Two unlined bio-swales are proposed to be located along I-215 SB and I-215 NB off-ramps. In addition, two bio-strips are proposed to be located along I-215 SB and I-215 NB on-ramps. The post construction treatment area is estimated to be 2.92 acres. The proposed treatment BMPs would treat 5.61 acres within the Caltrans ROW. During Final Design, the treatment areas will be determined when more design information is available and the treatment BMPs will be evaluated to determine if they meet the requirements for post construction storm water treatment controls under the Caltrans Statewide NPDES Storm Water Permit (Order No. 2012-0011-DWQ). Therefore, a less than significant impact is identified for this issue area.

**b)** **No Impact.** The proposed Project is located within the Bunker Hill Subbasin, which is part of the Upper Santa Ana Valley Groundwater Basin. Groundwater management within the Bunker Hill Subbasin is performed by the San Bernardino Valley Water Conservation District (SBVWCD 2007). Groundwater management in the Bunker Hill Subbasin is based primarily on the maintenance of groundwater levels in the pressure zone. Inflows and outflows are monitored and adjusted so as not to allow water levels to rise to the ground surface in downtown San Bernardino, where the pressure zone exists. The Santa Ana River Basin Plan has designated the following beneficial uses for the Bunker Hill Subbasin:

- Municipal and Domestic Supply (MUN) waters are used for community, military, municipal, or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
- Agricultural Supply (AGR) waters are used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
- Industrial Service Supply (IND) waters are used for industrial activities that do not depend primarily on water quality. These uses may include, but are not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil well re-pressurization.
- Industrial Process Supply (PROC) waters are used for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, process water supply and all uses of water related to product manufacture or food preparation.

A review of available groundwater data obtained from the California Department of Water Resources (DWR 2017) indicated Well Number 01N04W20M001S, located approximately 0.75 mile south of the Project limits, had recorded groundwater data dating from 1951 with a water level at the well at approximately 105 feet bgs. Groundwater was not encountered to depths of about 50 feet bgs during geotechnical field exploration activities within the Project limits. The maximum excavation depth for the proposed Project is not anticipated to exceed 15 feet bgs. As such, groundwater is not expected to be encountered during construction activities.

In addition, the proposed Project does not propose to use groundwater resources or to otherwise affect any groundwater resources that are used for water supply. The Project is not located in an area identified for groundwater recharge. As such, the proposed Project would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater water table. Therefore, no impact associated with this issue area is anticipated to occur, and no mitigation measures are required.

**ci, ii, iii, iv) <u>Less than Significant Impact.</u>** As discussed in Response 2.10a, the proposed Project would be required to comply with the Construction General Permit and develop a SWPPP to address all potential sources of pollution, which may affect water quality including sediment erosion and siltation. Measures WQ-1 through WQ-3, provided in Section 2.10.2, and Measure HAZ-6, identified in Section 2.9.2, would minimize sediment impacts and ensure compliance with federal, state, and local water quality standards as a result of Project improvements.

Implementation of the proposed Project would not substantially alter the existing drainage pattern throughout the Project limits and surrounding area. The proposed Project would implement post construction source control BMPs (Design Pollution Prevention BMPs), such as preservation of existing vegetation and slope/surface protection systems (permanent soil stabilization), as well as concentrated flow conveyance systems, such as concrete ditches, oversize drains, inlets, down drains, and storm drain pipes. Additional stormwater runoff as a result of the proposed Project would be treated by the proposed treatment BMPs, two bio-swales or bio-strips, which are anticipated to treat approximately 5.6 acres within Caltrans ROW. Design of the potential treatment BMPs would be finalized during Final Design of the Project, when more design information is available and the treatment BMPs would be evaluated to

determine if they meet the requirements for post construction storm water treatment controls under the Caltrans Statewide NPDES Storm Water Permit (Order No. 2012-0011-DWQ). With incorporation of Minimization Measures WQ-1 through WQ-3, and HAZ-6, impacts associated with this issue area would remain at a less than significant level.

**d)** **No Impact.** The proposed Project is located over 50 miles east of the Pacific Ocean, and the nearest body of water is located more than 4 miles from the Project limits. Therefore, the proposed Project is not within tsunami or seiche hazard zones. According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map, the proposed Project is located within an area classified as Zone X. Areas classified as Zone X are outside of the 100-year floodplain zone (FEMA 2016). Therefore, the proposed Project is not located within a 100-floodplain. As shown in Figure S-2 – Seven Oaks Dam Inundation in the City's General Plan (City of San Bernardino 2005a), the proposed Project is not located in an area susceptible to dam or levee inundation. Since the proposed Project is not located next to the ocean, a body of water, within a floodplain, or within a dam inundation area, no impacts associated with this issue are anticipated to occur, and no mitigation measures are required.

**e)** **No Impact.** As previously discussed in Response 2.10a and 2.10b, the proposed Project would be designed and implemented consistent with the federal, state, and local water quality control plans and groundwater management plans.

The proposed Project would be designed to meet the water quality standards outlined by the Caltrans Storm Water Management Plan, NPDES permit, the Construction General Permit, and the Santa Ana River Basin Plan. In addition, the proposed Project does not propose to use groundwater resources or otherwise affect any groundwater resources that are used for water supply. The Project is not located in an area identified for groundwater recharge. As such, the proposed Project would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater water table. Therefore, the proposed Project would not conflict with or obstruct the implementation of any applicable water quality control plans or groundwater management plans. No impact has been identified for this issue area.

## 2.10.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required; however, the following measures will be implemented to minimize the impacts on water quality as a result of the proposed Project.

**WQ-1** **National Pollutant Discharge Elimination System Compliance.** SBCTA will ensure that its designated contractor comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006- DWQ.

**WQ-2** **Design Pollution Best Management Practices.** SBCTA will ensure that design pollution prevention BMPs are implemented, such as preservation of existing vegetation and slope/surface protection systems (permanent soil stabilization), as well as concentrated flow conveyance systems, such as concrete ditches, oversize drains, inlets, down drains, and storm drain pipes.

**WQ-3** **Best Management Practice Implementation.** SBCTA will ensure that the Caltrans-approved treatment BMP are implemented in accordance with the SWMP and consistent with the requirements of the NPDES Statewide Storm Water Permit Waste Discharge Requirements for Caltrans (Order No. 2012-0011-DWQ, NPDES No. CAS00003, adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (effective April 7, 2015). Treatment BMPs may include bio-swales and bio-strips.

## 2.11 Land Use and Planning

| **LAND USE AND PLANNING**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Physically divide an established community? | ☐ | ☐ | ☐ | ☒ |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | ☐ | ☐ | ☐ | ☒ |

### 2.11.1 Discussion of Environmental Evaluation Question 2.11 Land Use and Planning

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Community Impact Assessment Memorandum* (Caltrans 2019c). For purposes of this section, the area of analysis to determine land use impacts is defined as the Project limits.

**a)** **No Impact.** The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying areas. The proposed Project would result in the improvement and realignment of an existing transportation facility at the I-215/University Parkway interchange through the construction of a DDI and other traffic improvements related to bike and pedestrian access, striping, and signaling.

The proposed Project would provide for more safe and effective bicycle and pedestrian connections throughout the reconfigured interchange. Specifically, implementation of the proposed Project would result in the construction of a 4.5-foot-wide Class II bike lane in the northbound and southbound directions of the I-215/University Parkway interchange core. This would allow bicyclists to travel safely along University Parkway through the DDI. The proposed Project would also include improvements for pedestrian access at the interchange and allow for pedestrians to cross the DDI's interchange core by a protected pedestrian pathway. Implementation of the proposed Project would not create a barrier that divides the existing neighborhood. No impact is identified for this issue area, and no mitigation measures are required.

**b)** **No Impact**. As shown in Table 2-2, the proposed Project is consistent with the goals and policies of local and regional land use plans and regulations. No impact is identified for this issue area, and no mitigation measures are requires.

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **Federal Transportation Improvement Program** | |
| The Federal Transportation Improvement Program (FTIP) is a federally managed 4-year program of all the proposed surface transportation projects that will receive federal funding or are subject to a federally required action over a 6-year period. The FTIP is prioritized to implement the region's overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while supporting efforts to attain federal and state air quality standards for the region by reducing transportation related air pollution. FTIP includes projects related to highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, high occupancy toll lanes, signal synchronization, intersection improvements, freeway ramps, and non-motorized projects-bicycle and pedestrian. | **Consistent.** The proposed Project is listed in the Final 2019 FTIP (Project No. SBD59204). Implementation of the proposed Project would alleviate traffic collisions related to congestion by improving operational efficiency of vehicles, bicyclists, and pedestrians at the I-215/University Parkway interchange. Therefore, the proposed Project is consistent with the FTIP program. |
| **Southern California Association of Governments – 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy** | |
| **Goal 2:** Maximize mobility and accessibility for all people and goods in the region. | **Consistent.** The purpose of the proposed Project is to plan for the projected regional population growth, relieve traffic congestion, and reduce related GHG emissions by providing an improved and efficient signalized intersection for vehicles, bicyclists, and pedestrians. Although no existing bus stops are located within the Project limits, the overall improved connectivity within the interchange for both pedestrians and bicyclists would allow transit riders to access these bus stops adjacent to the project limits more safety and efficiently. Therefore, the proposed Project is consistent with these goals. |
| **Goal 3:** Ensure travel safety and reliability for all people and goods in the region. | |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **Caltrans Complete Streets** | |
| Increased transportation choices. | **Consistent.** The DDI at the I-215/University Parkway interchange would increase the overall operational efficiency and capacity of the transportation network by providing accessible and efficient traffic movements (motorized and non-motorized) through the interchange. The proposed roadway improvements under the proposed Project would also eliminate several vehicular crossing conflicts and reduce the amount and severity of crashes while promoting alternative modes of transportation through improvements in bicycle and pedestrian access.<br>Therefore, the proposed Project is consistent with this goal. |
| Improve return on infrastructure investments | **Consistent.** The integration of sidewalks, bike lanes, and dedicated crossings into the design of the Project would be consistent with the Complete Streets concepts and spare the expense of retrofits for Complete Streets elements at a later date. Therefore, the proposed Project is consistent with this goal. |
| Livable communities | **Consistent.** The proposed roadway improvements would encourage and make available to the surrounding community and university campus alternative modes of transportation, such as bicycling and walking. Through implementation of the proposed roadway improvements, the community would have multimodal options for work and play in the area, as well as an improved transportation facility aimed at reducing accidents and congestion at the interchange. Therefore, the proposed Project is consistent with this goal. |
| Improved safety | **Consistent.** The proposed roadway improvements under the proposed Project would accommodate bicyclists and pedestrians, and reduces the number and severity of crashes at the existing interchange. Therefore, the proposed Project is consistent with this goal. |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| Improved air quality. | **Consistent.** GHG emissions would be reduced through less traffic congestion at the interchange and more non-motorized and public transit trips via improved bicycle and pedestrian access under the proposed Project. Although no existing bus stops are located within The Project limits, the overall improved connectivity for pedestrians and bicyclists within the interchange would allow transit riders to access these bus stops adjacent to the project limits more safely and efficiently. Therefore, the proposed Project is consistent with this goal. |
| Increase in walking and bicycling. | **Consistent.** Implementation of the proposed Project would result in the construction of a 4.5-foot-wide Class II bike lane in the northbound and southbound directions of the I-215/University Parkway interchange core. This would allow bicyclists to travel safely along University Parkway through the DDI. The proposed Project would also include improvements for pedestrian access at the interchange and allow pedestrians to cross the DDI's interchange core by a protected pedestrian pathway. Therefore, the proposed Project is consistent with this goal. |
| Bicycle facilities. | |
| Pedestrian facilities. | |
| **San Bernardino County Non-Motorized Transportation Plan** | |
| Goal 1: Increased bicycle and pedestrian access - Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites. | **Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would construct 4.5-foot-wide shoulders in both the northbound and southbound directions of the interchange core. The construction of the 4.5--foot- wide shoulders would allow bicyclists to safely travel along University Parkway through the DDI and would create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. The proposed Project would also include improvements to pedestrian access at this interchange. Therefore, the proposed Project is consistent with these goals. |
| Goal 4: Improved bicycle and pedestrian safety - Encourage local and statewide policies and practices that improve bicycle and pedestrian safety. | |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **City of San Bernardino General Plan - Land Use Element** | |
| **Goal 2.7:** Provide for the development and maintenance of public infrastructure and services to support existing and future residents, businesses, recreation, and other uses. | **Consistent.** The purpose of the proposed Project is to address existing traffic deficiencies and provide improvements to accommodate for the projected regional population growth in the study area, increases in enrollment at CSUSB, and an increase in traffic demand at the existing I-215/University Parkway interchange for the horizon year of 2040. The proposed Project would improve vehicular, bicycle, and pedestrian access through the freeway ramp intersections. Therefore, the proposed Project is consistent with this goal. |
| **City of San Bernardino General Plan - Economic Development Element** | |
| **Policy 4.8.2:** Fund key surface transportation improvements including new interchanges along I-215 and access from the I-10 to the San Bernardino International Airport and Trade Center along Waterman, Mountain View, Tippecanoe, and Mill. | **Consistent.** The proposed Project would provide operational improvements to traffic flow associated with the I-215/University Parkway Interchange. These operational improvements would improve all four legs of the current interchange, as well as directional movement through the freeway system. Therefore, the proposed Project is consistent with this policy. |
| **City of San Bernardino General Plan – Community Design Element** | |
| **Policy 5.3.3:** A well-integrated network of bike and pedestrian paths should connect residential areas to schools, parks, and shopping centers. | **Consistent.** The proposed Project would implement 4.5-foot-wide shoulder in the northbound and southbound directions of the interchange core, which would allow for bicyclists to safely travel along University Parkway through the DDI. The proposed roadway improvements would also create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southeastern border of the City. The proposed Project would also include improvements for pedestrian access at this interchange. Therefore, the proposed Project is consistent with this policy. |
| **City of San Bernardino General Plan - Circulation Element** | |
| **Goal 6.1:** Provide a well-maintained street system | **Consistent.** The I-215/University Parkway interchange serves as the primary freeway access for CSUSB and a |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **Policy 6.1.1:** Maintain and rehabilitate all components of the circulation system, including roadways, sidewalks, bicycle facilities, and pedestrian facilities. | number of surrounding businesses and area residents. As a result, the increase commuter traffic at the I-215/University Parkway Interchange has caused inadequate interchange queuing capacity and existing geometric deficiencies, which have resulted in higher than state average collision rates at both the northbound exit and southbound entrance ramps. Extensive commercial and industrial developments, as well as the expansion of CSUSB, which is expected to increase its student population from 15,000 to 25,000 in the next 10 years, have contributed to the growth in the area surrounding the Project. Existing (2017) traffic conditions indicate that both the northbound and southbound ramp intersections currently operate at LOS E or F during PM peak hours. The results of the traffic analysis indicate all study intersections and freeway mainline segments are forecasted to operate at LOS D or better under the opening year 2020 build conditions. Therefore, the proposed Project would not result in a deterioration in LOS within and immediately adjacent to the University Parkway interchange.<br><br>Implementation of the DDI system would allow more efficient left-turn and right-turn movements at ramp terminals and reduce delay and improve traffic flow for multiple movements within the constrained area. The Project proposes to reconfigure the interchanges to improve traffic operations, which would include additional street lighting, traffic signal modifications, minor paving, minor utility relocations, signage changes, re-striping, turn lanes, and median streetscape improvements to improve circulation and access through the freeway ramp intersection. Therefore, the proposed Project is consistent with these goals and policies. |
| **Goal 6.2:** Maintain efficient traffic operations on City streets. | |
| **Policy 6.2.1:** Maintain a peak hour level of service D or better at street intersections. | |
| **Policy 6.2.5:** Design roadways, monitor traffic flow, and employ traffic control measures (e.g., signalization, access control, exclusive right and left turn-turn lanes, lane striping, and signage) to ensure City streets and roads continue to function safely within our Level of Service standards. | |
| **Goal 6.3:** Provide a safe circulation system. | **Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **Policy 6.3.1:** Promote the principle that streets have multiple uses and users, and protect the safety of all users. | would also include 4.5-foot-wide shoulders in the NB and SB directions of the interchange core, which allows bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing continuous bike access from CSUSB to the southeastern border of the City.<br>The proposed Project would also include improvements for pedestrian access at this interchange and allow pedestrians to traverse the interchange core of the DDI by a protected multipurpose pathway. Crossing distances would be shortened for pedestrians, as pedestrians would be crossing to the protected multipurpose pathway located in the middle of the DDI, instead of crossing the entire width of the street at a typical street intersection. Therefore, the proposed Project is consistent with these goals and policies. |
| **Goal 6.6:** Promote a network of multimodal transportation facilities that are safe, efficient, and connected to various points of the City and the region. | **Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would also include 4.5-foot-wide shoulders in the NB and SB directions of the interchange core, which allows bicyclists to safely travel along University Parkway through the DDI. This would assist in creating a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. Therefore, the proposed Project is consistent with this policy. |
| **Policy 6.6.4:** Ensure accessibility to public transportation for seniors and persons with disabilities. | **Consistent.** The proposed Project would reconfigure this interchange by implementing a DDI, which would improve safety and traffic flow for multiple movements. Accessibility to public transportation along University Parkway for all people utilizing public transportation facilities, including seniors and persons with disabilities, would be maintained. Therefore, the proposed Project is consistent with this policy. |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **City of San Bernardino General Plan - Public Facilities and Services Element** | |
| **Goal 7.4:** Maintain and enhance the cultural quality of life for the City's residents. | **Consistent.** The I-215/University Parkway interchange is considered a gateway into the City, as well as the University District. Currently, along the abutment walls of the bridge are twin murals welcoming users into the City of San Bernardino and the University District. The proposed Project would not widen the existing bridge. The Project team has coordinated with CSUSB throughout the design process; as such, the Project team has learned that CSUSB will be repainting the twin murals with a new design. Repainting of the twin murals may occur prior to construction of the proposed Project. If this occurs, the Project would protect in place the twin murals throughout construction to ensure the scenic resource is maintained. If repainting occurs after the construction of the proposed Project, CSUSB has agreed to repaint the murals, which will then include the new concrete barrier. Therefore, the proposed Project is consistent with this goal. |

**Table 2-2. Land Use Plans and Policies Consistency Summary**

| Goals and Policies | Project Consistency |
|---|---|
| **City of San Bernardino University Specific Plan** | |
| **Physical Connectivity:** Develop a seamless connection between the community and University through access, tailored street naming, and physical improvements such as landscaping, streetscape, signage, and public art. | **Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would also include 4.5-foot-wide shoulders in the NB and SB directions of the interchange core, which allows bicyclists to safely travel along University Parkway through the DDI. This would assist in creating a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City.<br>The proposed Project would also include improvements for pedestrian access at this interchange and allow pedestrians to traverse the interchange core of the DDI by a protected multipurpose pathway. Crossing distances would be shortened for pedestrians since pedestrians would be crossing to the protected multipurpose pathway, which is located in the DDI's interchange core, instead of crossing the entire width of the street at a typical street intersection.<br>Other improvements, such as striping, signage, and maintaining the murals on the bridge abutment walls, would also be implemented to guide all users through the DDI safely. Although improvements to public transit within the Project limits are not proposed, physical improvements, through the implementation of signage, signals, and the DDI, would help develop seamless vehicular connectivity through University Parkway, which would benefit transit traversing the Project limits. Therefore, the proposed Project is consistent with this goal. |

Source: Caltrans Complete Streets Program; City of San Bernardino General Plan; City of San Bernardino University District Specific Plan; San Bernardino County Transportation Authority Non-Motorized Transportation Plan; Southern California Association of Governments 2016-2040 RTP/SCS; Southern California Association of Governments Final 2019 FTIP.

## 2.11.2 Avoidance, Minimization and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for land use.

## 2.12 Mineral Resources

| **MINERAL RESOURCES**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | ☐ | ☐ | ☐ | ☒ |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | ☐ | ☐ | ☐ | ☒ |

### 2.12.1 Discussion of Environmental Evaluation Question 2.12 – Mineral Resources

For purposes of this section, the area of analysis to determine mineral resource impacts is defined as the Project limits.

**a)** **No Impact.** According to the City's General Plan Natural Resources and Conservation Chapter (City of San Bernardino 2005a), the Project limits are within the Mineral Resource Zone (MRZ)-1 designation set by the State Mining and Geology Board. MRZ-1 is an area where available geological information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits would occur. Because the land within the Project limits is identified as an MRZ-1 area, the proposed Project is not considered to be a potential future source of mineral resources. Implementation of the proposed Project would not result in the loss of availability of a known mineral resource of value to the region and the residents of the state. No impact is identified for this issue area, and no mitigation measures are required.

**b)** **No Impact.** Please see response to 2.12.a).

### 2.12.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for mineral resources.

## 2.13 Noise

| **NOISE**: Would the project result in: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | ☐ | ☐ | ☒ | ☐ |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | ☐ | ☐ | ☒ | ☐ |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | ☐ | ☐ | ☐ | ☒ |

### 2.13.1 Discussion of Environmental Evaluation Question 2.13 Noise

In accordance with Caltrans' Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (Traffic Noise Analysis Protocol) (Caltrans 2011), a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the noise abatement criteria (NAC).

**a)** **Less than Significant Impact.** Under 23 CFR 772.7, projects are categorized as Type I, Type II, or Type III. FHWA defines a Type I project as the construction of a highway on a new location, the physical alteration of an existing highway where there is either a substantial horizontal or substantial vertical alteration, and/or the addition of through lanes. Type II projects involve construction of noise abatement on an existing highway with no changes to highway capacity or alignment. According to the *Approach for Noise Studies Memorandum*, dated October 16, 2017, it was determined that the proposed Project does not meet the classifications of a Type I or Type II project. As the proposed Project is not a Type I or Type II project, it is considered a Type III project, and no noise analysis is required for the Project. Therefore, the proposed Project would have no long-term noise impacts.

Construction activities under the proposed Project would include grubbing/land clearing, grading/excavation, minor utilities relocation, and minor paving. Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and Saturdays, in accordance with City of San Bernardino standards. No building structures would be disturbed as part of the proposed Project. Construction staging is anticipated to occur within the existing ROW and limits shown on Figure 1-2.

Construction of the proposed Project would require use of heavy equipment, which may be periodically audible at off-site locations. Received sound levels would vary and fluctuate based on the construction activity, equipment class and type, and distance between noise source and receiver at any given time. Table 2-3 lists typical construction equipment noise levels recommended for noise impact assessments based on a distance of 50 feet between a piece of equipment and a noise receptor.

**Table 2-3. Typical Maximum Construction Equipment Noise Levels**

| Type of Equipment | Range of Maximum Sound Levels (dBA at 50 feet) | Suggested Maximum Sound Levels for Analysis (dBA at 50 feet) |
|---|---|---|
| Pile drivers, 12,000 to 18,000 ft-lb/blow | 81 – 96 | 93 |
| Rock drills | 83 – 99 | 96 |
| Jack HAMMERS | 75 – 85 | 82 |
| Pneumatic tools | 78 – 88 | 85 |
| Pumps | 74 – 84 | 80 |
| Dozers | 77 – 90 | 85 |
| Scrapers | 83 – 91 | 87 |
| Haul trucks | 83 – 94 | 88 |
| Cranes | 79 – 86 | 82 |
| Portable generators | 71 – 87 | 80 |
| Rollers | 75 – 82 | 80 |
| Tractors | 77 – 82 | 80 |
| Front-end loaders | 77 – 90 | 86 |
| Hydraulic backhoe | 81 – 90 | 86 |
| Hydraulic excavators | 81 – 90 | 86 |
| Graders | 79 – 89 | 86 |
| Air compressors | 76 – 89 | 86 |
| Trucks | 81 – 87 | 86 |

Source: Beranek & Newman 1987

Noise-sensitive land uses may include residential uses, schools, hospitals, nursing homes, religious institutions, libraries, and similar uses. The areas within and immediately adjacent to the Project limits are predominately developed and generally consist of commercial/retail land uses. As previously stated, a motel is located adjacent to the Project limits and includes an outdoor swimming pool.

Compliance with construction hours specified by the City would be required. To minimize construction noise impacts on sensitive land uses adjacent to the Project limits, construction noise is regulated by Caltrans Standard Specifications in Section 14-8.02, "Noise Control," and also by Standard Special Provisions (SSP) S5 310. The noise level from the Contractor's operations between the hours of 9:00 p.m. and 6:00 a.m. will not exceed 86 dBA $L_{max}$ at a distance of 50 feet. In addition to adherence to the City's construction hours, Minimization Measures N-1 through N-4 would also be implemented as a part of the proposed Project. These minimization measures provide standard best management practices associated with the use of construction equipment. Therefore, the proposed Project's short-term construction noise impacts would be less than significant.

**b)** **Less than Significant Impact.** Project construction activities have the potential to generate ground-borne vibration with the use of heavy equipment. The Project would include grubbing/land clearing, grading/excavation, minor utilities relocation, and minor paving. Construction staging is anticipated to occur within the existing ROW and within limits shown on Figure 1-2. Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and Saturdays, in accordance with City of San Bernardino standards. No building structures would be disturbed under the proposed Project. Standard conditions to reduce and minimize noise generated by construction would be implemented and also reduce vibration from construction activities. The FTA provides criteria for acceptable levels of ground-borne vibration based on the relative perception of a vibration event for vibration-sensitive land uses, shown in Table 2-4. Table 2-5 lists vibration source amplitudes for construction equipment. As pile driving is not required, the highest reference PPV for the proposed Project would be 0.210 inches per second (in/sec) for on-site vibratory rollers.

**Table 2-4. Ground-borne Vibration and Noise Impact Criteria – Human Annoyance**

| Land Use Category | Max Lv (VdB)[1] | Description |
|---|---|---|
| Workshop | 90 | Distinctly felt vibration. Appropriate to workshops and non-sensitive areas. |
| Office | 84 | Felt vibration. Appropriate to offices and non-sensitive areas. |
| Residential – Daytime | 78 | Barely felt vibration. Adequate for computer equipment. |
| Residential – Nighttime | 72 | Vibration not felt, but ground-borne noise may be audible inside quiet rooms. |

Notes:
[1] As measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz

**Table 2-5. Vibration Source Amplitudes for Construction Equipment**

| Equipment | PPV at 25 feet (inch/second) | Approximate Lv1 at 25 feet (VdB) |
|---|---|---|
| Pile driver (impact) – upper range | 1.518 | 112 |
| Pile driver (impact) – typical | 0.644 | 104 |
| Pile drive (sonic) – upper range | 0.734 | 105 |
| Pile drive (sonic) – typical | 0.170 | 93 |
| Clam shovel drop (slurry wall) | 0.202 | 94 |
| Hydromill (slurry wall) – in soil | 0.008 | 66 |
| Hydromill (slurry wall) – in rock | 0.017 | 75 |
| Vibratory roller | 0.210 | 94 |
| Hoe ram | 0.089 | 87 |
| Large bulldozer | 0.089 | 87 |
| Caisson drilling | 0.089 | 87 |
| Loaded trucks | 0.076 | 86 |

**Table 2-5. Vibration Source Amplitudes for Construction Equipment**

| Equipment | PPV at 25 feet (inch/second) | Approximate Lv1 at 25 feet (VdB) |
|---|---|---|
| Jackhammer | 0.035 | 79 |
| Small bulldozer | 0.003 | 58 |

Source: FTA 2006

Notes:
[1] RMS velocity in decibels (VdB) re 1 micro-inch/second

The motel (Motel 6) located south of the project limits at 1960 Ostrems Way would be approximately 100 feet from Project construction areas that would require the use of vibratory rollers. At 100 feet, the roller vibration level would be reduced from 94 to 76 VdB. This level would be less than FTA's daytime annoyance threshold of 78 VdB listed in Table 2-5. Thus, vibration annoyance impacts would be less than significant at nearby sensitive receptors.

Construction vibration would cease to occur once Project construction is completed. The proposed Project would not generate excessive groundborne vibration or groundborne noise levels, and a less than significant impact has been identified for this issue area.

**c)** **No Impact.** The proposed Project is not located within the vicinity of a private airstrip or airport land use plan. The closest airport is the San Bernardino International Airport, located approximately 6 miles southeast of the Project limits. The Ontario International Airport is located approximately 16 miles southwest of the Project limits. Therefore, the Project would not expose people residing or working within the project limits to excessive noise levels. No impact is identified for this issue area.

## 2.13.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are required; however, the following minimization measures will be incorporated to minimize the potential construction noise impacts on nearby sensitive receptors:

**N-1** **Use of Mufflers for Construction Equipment.** During all site excavation and grading, SBCTA will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.

**N-2** **Placement of Stationary Construction Equipment.** During construction, SBCTA will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest to the Project limits.

**N-3** **Equipment Staging Areas.** During construction, SBCTA will locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest to the Project limits.

**N-4** **Caltrans Standard Special Provision 14-8.02.** During construction, SBCTA will ensure all heavy construction activities that would potentially exceed 86 dBA $L_{max}$ at 50 feet will be conducted between 6:00 a.m. and 9:00 p.m. The Project will incorporate all applicable procedures and requirements detailed in the Caltrans SSP 14-8.02: Noise Control, as applicable.

## 2.14 Population and Housing

| **POPULATION AND HOUSING**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | ☐ | ☐ | ☐ | ☒ |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ☒ |

### 2.14.1 Discussion of Environmental Evaluation Question 2.14 Population and Housing

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Community Impact Assessment Memorandum* (Caltrans 2019c). For purposes of this section, the area of analysis to determine population and housing impacts is defined as the Project limits.

**a)** **No Impact.** The proposed Project is an interchange improvement project and would result in the reconfiguration of an existing roadway. The proposed Project does not propose the construction of new residential units or commercial buildings. The purpose of the proposed Project is to provide improvements to the existing circulation system to accommodate for the projected regional population growth, CSUSB enrollment increases, and increase traffic demands at the existing I-215/University Parkway interchange for the planning design year of 2040. Construction and operation of the proposed Project is not capacity enhancing, as the proposed Project would reconfigure the interchange to provide safer and more efficient traffic operations throughout the interchange. No impact is identified for this issue area, and no mitigation measures are required.

**b)** **No Impact.** The proposed Project would not displace nor relocate any people or housing as a result of construction or operation. The purpose of the proposed Project is to reconfigure the existing interchange at I-215 and University Parkway in the City of San Bernardino. Construction of the proposed Project would not result in the displacement of people or housing and would not require the construction of replacement housing. No impact is identified for this issue area, and no mitigation measures are required.

### 2.14.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for population and housing.

## 2.15 Public Services

| PUBLIC SERVICES: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | |
| i. Fire protection? | ☐ | ☐ | ☒ | ☐ |
| ii. Police protection? | ☐ | ☐ | ☒ | ☐ |
| iii. Schools? | ☐ | ☐ | ☐ | ☒ |
| iv. Parks? | ☐ | ☐ | ☐ | ☒ |
| v. Other public facilities? | ☐ | ☐ | ☐ | ☒ |

### 2.15.1 Discussion of Environmental Evaluation Question 2.15 – Public Service

For purposes of this section, the area of analysis to determine public service impacts is defined as the Project limits.

**a.i)** **Less than Significant Impact.** As of July 1, 2016, fire protection and emergency medical response services within the City are provided by the San Bernardino County Fire District (SBCFD 2019). The City's service coverage is specifically provided by Division 2 (previously Division 6). There are 16 fire stations within Division 2. The closest County fire station to the I-215/University Parkway interchange is the Muscoy Station #75 located at 2852 Macy Street, Muscoy, CA, 92407. This station is approximately 1.5 mile south of the I-215/ University Parkway interchange.

The proposed Project would not construct any new residential or non-residential structures that could induce population or employment growth. Therefore, there would be no increase in demand for fire services and no need for new or expanded fire services or facilities as a result of Project implementation. However, during construction of the proposed Project, there may be a need to restrict roadway access at the interchange, which may result in temporary impacts on vehicular flow in the Project limits. To ensure that construction activities would not impact response time for fire services in the area, Minimization Measure TR-1, TMP, would be required. Minimization Measure TR-1 would be incorporated as a part of the proposed Project to minimize impacts during construction activities to motorists and emergency vehicles. Implementation of Minimization Measure TR-1 would ensure construction response time for fire service vehicles to a less than significant impact. Furthermore,

implementation of the proposed Project would provide improvements that would alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters. The DDI configuration would allow more efficient left-turn and right-turn movements at ramp terminals. With more efficient flow of traffic through the interchange, it is anticipated that operation of the proposed Project would not impact response times for fire services. A less than significant impact has been identified for this issue area.

**a.ii)** **Less than Significant Impact.** The City is served by the City of San Bernardino Police Department and the County Sheriff in the unincorporated areas. The proposed Project is located within the Northwest Patrol District, North District, and Beat 2 (City of San Bernardino 2019b). The closest police station is located at 710 N D Street, San Bernardino, CA, 92401 and is approximately 5 miles southeast from the I-215/University Parkway interchange.

The proposed Project would not construct any new residential or non-residential structures that could induce population or employment growth. Therefore, there would be no increase in demand for police services and no need for new or expanded police services or facilities as a result of Project implementation. However, during construction of the proposed Project, there may be a need to restrict roadway access at the interchange, which may result in temporary impacts on vehicular flow in the Project limits. To ensure that construction activities would not impact response time for police services in the area, Minimization Measure TR-1 would be incorporated. Minimization Measure TR-1 ensures that a TMP would be developed prior to and utilized during construction activities to minimize impacts on motorists and emergency vehicles. Incorporation of Minimization Measure TR-1 would ensure construction response time is minimized to a less than significant impact level. Furthermore, implementation of the proposed Project would provide improvements that would alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters. The DDI configuration would allow more efficient left-turn and right-turn movements at ramp terminals. With more efficient flow of traffic through the interchange, it is anticipated that operation of the proposed Project would not impact response times for police services. A less than significant impact has been identified for this issue area.

**a.iii)** **No Impact.** The proposed Project would result in the construction of improvements at the I-215/University Parkway Interchange in order to provide safer and more efficient traffic operations throughout the interchange. The proposed Project does not include housing units or other urban development that would increase the population or the number of students enrolled in schools within the Project limits. Therefore, the proposed Project would not result in an increase in demand for school services or other public facilities or result in the need for additional or altered facilities. No impact is identified for this issue area.

**a.iv)** **No Impact.** The proposed Project would not construct any new residential or non-residential structures that could induce population or employment growth. The closest park to the University Park and I-215 interchange is Hudson Park, which is located at 4565 Park Drive, San Bernardino, CA, 92407, approximately 7 miles from the interchange. Hudson Park mainly serves the residential neighborhood that surrounds it. The proposed Project is located along a major arterial and freeway interchange and would not impact the local population's access to the park. Therefore, the use and demand on recreational facilities would not increase, and the ratio of park acreage per resident would not be affected. Furthermore, the need to construct new

recreational facilities would not be warranted, as the proposed Project is a roadway improvement project. No impact is identified for this issue area.

**a.v)** **No Impact.** The proposed Project would not construct any new residential or non-residential structures that could induce population or employment growth. Therefore, the proposed Project would not induce additional demand on existing public services, nor necessitate the need to construct new public service facilities to meet an increase in demand resulting from growth. No impact is identified for this issue area.

## 2.15.2 Avoidance, Minimization, and/or Mitigation Measures

Minimization Measure TR-1 has been identified under Section 2.17 (Transportation).

## 2.16 Recreation

| RECREATION: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | ☐ | ☐ | ☐ | ☒ |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | ☐ | ☐ | ☐ | ☒ |

### 2.16.1 Discussion of Environmental Evaluation Question 2.16 – Recreation

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project Community Impact Assessment Memorandum* (Caltrans 2019c). For purposes of this section, the area of analysis to determine recreational resource impacts is defined as the Project limits.

**a)** **No Impact.** The proposed Project includes the construction and reconfiguration of an existing interchange between I-215 and University Parkway. The Project limits do not include any existing or proposed neighborhood or regional recreational facilities, and the proposed Project would not increase population or employment growth. Therefore, implementation of the proposed Project would not result in a population increase to the area that would increase demand on existing public or private parks, or any other recreational facilities. No impact is identified for this issue area, and no mitigation measures are required.

**b)** **No Impact.** The proposed Project would include the construction and operation of the existing interchange at I-215/University Parkway and would not induce an increase in population or employment growth. The proposed Project does not include any existing or proposed park facilities within or adjacent to the Project limits. However, as part of the improvements proposed at the I-215/University Parkway interchange, the construction of a Class II bike lane in both the northbound and southbound directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. The construction of the Class II bike lane has been included as part of the Project's area of impact and included within the Project limits. Therefore, construction of the Class II bike lane would not have an adverse impact on the environment, as such impacts have already been analyzed as part of the proposed Project. No impact is identified for this issue area, and no mitigation measures are required.

### 2.16.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for recreational resources.

## 2.17 Transportation

| **TRANSPORTATION**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | ☐ | ☐ | ☐ | ☒ |
| b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | ☐ | ☐ | ☒ | ☐ |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | ☐ | ☐ | ☐ | ☒ |
| d) Result in inadequate emergency access? | ☐ | ☐ | ☒ | ☐ |

### 2.17.1 Discussion of Environmental Evaluation Question 2.17 - Transportation

The information in this section based on the *I-215/University Parkway Interchange Improvement Project Traffic Operational Analysis Report* (TOAR) (Caltrans 2018f). For purposes of this section, the area of analysis to determine traffic impacts is defined as the traffic study area (TSA). The TSA contains the Project limits, as well as seven study intersections along University Parkway (between Hallmark Parkway and Varsity/State Street), I-215 freeway mainline segments and ramps (from State Route 210/I-215 Freeway interchange and the Palm Avenue interchange), and adjacent driveways within 500 feet west of the I-215/University Parkway interchange that might be impacted by the proposed Project.

**a)** **No Impact.** Table 2-2 lists the goals and policies of various plans applicable to the proposed Project and provides details on how the proposed Project is consistent with these goals and policies. As identified in Table 2-2, the proposed Project does not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, the proposed Project is extending the existing Class II bike lane along SB and NB University Parkway that begins north of the North Varsity Avenue/North State Street and University Parkway intersection and connects to the entrance of CSUSB, which is approximately 1 mile north of Project limits. This extension is proposed within the City's General Plan, SBTCA's 2015 San Bernardino County Non-Motorized Transportation Plan, and is listed in the Final 2019 FTIP (Project No. SBD59204). No impact is identified for this issue area.

**b)** **Less than Significant Impact.** The proposed Project is a transportation project subject to Section 15064.3 (b)(2) of the CEQA Guidelines. Although VMT were calculated for daily truck traffic on I-215 freeway mainline segment, the proposed Project would not impact VMT, as the proposed Project would implement a DDI to ease traffic congestion and increase the overall efficiency at the I-215/University

Parkway interchange. A TOAR was conducted for the existing (2017), opening year (2020) no-build and build conditions, and horizon year (2040) no-build and build conditions. The TOAR provided evaluation and assessment of 11 study intersections, 6 freeway mainline segments, and 4 freeway ramps within the TSA. A summary of LOS conditions for the TSA intersections, freeway mainline segments, and freeway ramps is provided in Table 2-6 through Table 2-8, respectively.

As shown in Table 2-6 through Table 2-8, all study intersections, freeway mainline segments, and freeway ramps within the TSA are forecasted to operate at LOS D or better under the opening year 2020 build conditions except for:

*Intersections:*

- North Varsity Avenue/North State Street and University Parkway (AM and PM peak hours)

*Freeway Ramps:*

- Southbound University Parkway off-ramp (AM peak hour)

Although the intersection at North Varsity Avenue and North State Street/University Parkway is expected to operate at LOS E, the delay that would be experienced would be reduced under the proposed Project in the morning peak hour (57.6 seconds) when compared to the no-build condition (124.8 seconds). For the afternoon peak hour, the delay that would be experienced would be negligible under the Proposed Project (63.6 seconds) when compared to the No-Build condition (62.8 seconds).

As shown in Table 2-6 though Table 2-8, all study intersections, freeway mainline segments, and freeway ramps within the TSA are forecast to operate at LOS D or better under the horizon year 2040 build conditions except for:

*Intersections:*

- North Varsity Avenue/North State Street and University Parkway (AM and PM peak hours)
- Driveway 3 and University Parkway (AM and PM peak hours)
- I-215 NB Off-Ramp and University Parkway (AM peak hour)

*Freeway Ramps:*

- Southbound University Parkway off-ramp (AM peak hour)

*Freeway Mainline Segments:*

- I-215 NB South of University Parkway on-ramp (PM peak hour)
- I-215 SB South of University Parkway on-ramp (AM and PM peak hours)

## Table 2-6. Summary of Intersection Level of Service

| | Existing | | Opening Year (2020) | | | | Horizon Year (2040) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | | No-Build | | Proposed Project | | No-Build | | Proposed Project | |
| **Study Area Intersection** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** |
| North Varsity Avenue/ North State Street & University Parkway | **F** | **E** | **F** | **E** | **E** | **E** | **F** | **F** | **F** | **F** |
| I-215 NB Ramp & University Parkway | **E** | **F** | **F** | **F** | A | A | **F** | **F** | D | D |
| I-215 SB Ramps & University Parkway | D | **E** | **E** | **F** | C | B | **F** | **F** | C | C |
| Hallmark Parkway & University Parkway | C | D | C | D | C | C | D | D | C | D |
| Driveway 1 & University Parkway | B | D | B | C | B | B | C | C | C | C |
| Driveway 2 & University Parkway | C | D | C | C | n/a | n/a | C | C | n/a | n/a |
| Driveway 3 & University Parkway | C | C | D | D | D | D | **F** | **F** | **F** | **F** |
| I-215 NB Off-Ramp Right-turn Movement and University Parkway | n/a | n/a | n/a | n/a | B | C | n/a | n/a | E | D |
| I-215 NB Off-Ramp Left-turn Movement and University Parkway | n/a | n/a | n/a | n/a | B | B | n/a | n/a | B | B |
| I-215 SB Off-Ramp Left-turn Movement and University Parkway | n/a | n/a | n/a | n/a | A | A | n/a | n/a | B | B |
| I-215 SB Off-Ramp Right-turn Movement and University Parkway | n/a | n/a | n/a | n/a | A | A | n/a | n/a | A | A |

Source: Caltrans 2018f

### Table 2-7. Summary of Freeway Mainline Level of Service

| | Existing | | Opening Year (2020) | | | | Horizon Year (2040) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | | No-Build | | Proposed Project | | No-Build | | Proposed Project | |
| **Freeway Mainline Segment** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** |
| **Northbound** | | | | | | | | | | |
| North of University Pkwy On-Ramp | B | D | B | D | B | D | B | D | B | D |
| Between University Pkwy Off-Ramp and University Pkwy On-Ramp | B | D | B | D | B | D | B | D | B | D |
| South of University Pkwy Off-Ramp | B | C | C | D | C | D | C | **E** | C | **E** |
| **Southbound** | | | | | | | | | | |
| North of University Pkwy Off-Ramp | D | B | D | C | D | C | D | C | D | C |
| Between University Pkwy Off-Ramp and University Pkwy On-Ramp | D | B | D | C | D | C | D | C | D | C |
| South of University Pkwy On-Ramp | D | C | D | D | D | D | **F** | **E** | **F** | **E** |

Source: Caltrans 2018f

Note: The Proposed Project would not modify the I-215 freeway mainline, therefore, LOS results would be identical under opening year (2020) and horizon year (2040) No-Build and Proposed Project conditions.

### Table 2-8. Summary of Freeway Ramp Level of Service

| | Existing | | Opening Year (2020) | | | | Horizon Year (2040) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2017 | | No-Build | | Proposed Project | | No-Build | | Proposed Project | |
| **Freeway Ramp** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** | **AM** | **PM** |
| **Northbound** | | | | | | | | | | |
| University Pkwy On-Ramp | B | C | B | D | B | D | B | D | B | D |
| University Pkwy Off-Ramp | B | C | B | C | B | C | C | D | C | D |
| **Southbound** | | | | | | | | | | |
| University Pkwy On-Ramp | D | C | E | C | E | C | F | E | F | E |
| University Pkwy Off-Ramp | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |

Source: Caltrans 2018f

Note: The Proposed Project would not modify the I-215 freeway ramp junction locations, therefore, LOS results would be identical under opening year (2020) and horizon year (2040) No-Build and Proposed Project conditions.

The results of the freeway mainline and ramp analysis indicate the impacts on the freeway system are a result of future traffic demand exceeding the capacity along the I-215 and are consistent under build and no-build conditions.

Under the opening year (2020) and horizon year (2040) build conditions, the proposed Project would not alter the ramps junction area and freeway mainline within the TSA; therefore, the LOS results for freeway ramps and mainline would be identical to the no-build conditions analysis.

In summary, the results of the analysis presented in the TOAR (operational LOS) show that the implementation of the proposed Project would maintain or improve traffic operations when compared with the No-Build Alternative at the I-215/University Parkway interchange. Analysis of the proposed Project shows that traffic operations along University Parkway would improve (reducing delays and congestion) compared with no-build conditions.

The traffic operations analysis indicates that acceptable operations could be restored throughout most of the TSA and maintained through 2040 by undertaking basic lane widening, reconfiguring the existing interchanges to a DDI, as defined under the proposed Project. Per Section 15064.3 (b)(2) of the CEQA Guidelines, the proposed Project is considered a transportation project that reduces, or has no impact on VMT, and should be presumed to cause a less than significant transportation impact. A less than significant impact has been identified for this issue area.

**c)** **No Impact.** As stated previously, the proposed Project is a transportation project that proposes to improve an existing interchange. The purpose of the proposed Project is to plan for the projected regional population growth, CSUSB enrollment increases, and increase traffic demands at the existing I-215/University Parkway interchange for the planning design year of 2040. Ongoing growth and development in the area has increased commuter traffic at the I-215/University Parkway interchange. The interchange is the primary freeway access for CSUSB, as well as a number of businesses and area residents. This has caused inadequate interchange queuing capacity and existing geometric deficiencies. Additionally, as identified in the TOAR (Caltrans 2018f), accident analysis and data assembled from Caltrans' Traffic Accident and Surveillance Analysis Systems indicates the collision rates at the northbound exit and SB entrance interchange ramps have higher than state average accident rates. Improvements at these locations would alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters. Therefore, the design of the proposed Project would not substantially increase hazards due to a geometric design feature, such as a dangerous intersection or incompatible use. No impact is identified for this issue area.

**d)** **Less Than Significant Impact.** As previously discussed in Section 2.15, Public Services, the implementation of the DDI under the proposed Project would provide improvements that would alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters by improving both ramp intersections of the current interchange, as well as directional movement through the system. The DDI configuration would allow more efficient left-turn and right-turn movements at ramp terminals. Therefore, it is anticipated that the implementation of the proposed Project would allow for more efficient flow of traffic through the interchange including for emergency vehicles and would not affect response times or service ratios. However, during construction of the proposed Project, temporary impacts on vehicular flow and traffic could impact response time. Therefore,

Minimization Measure TR-1 will be incorporated to ensure that a TMP is utilized during construction to minimize impacts on motorist and emergency vehicles. A less than significant impact is identified for this issue area.

## 2.17.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation measures are required; however, the following minimization measure will be implemented to minimize the potential construction traffic related impacts:

**TR-1** **Transportation Management Plan.** During Final Design, a TMP will be prepared for the Project. Key elements to be considered in the TMP include the following:

- Public information
- Motorist information strategies
- Incident management
- Construction strategies
- Demand management
- Alternative route strategies

## 2.18 Tribal Cultural Resources

| **TRIBAL CULTURAL RESOURCES:** Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | ☐ | ☐ | ☐ | ☒ |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☐ | ☒ |

### 2.18.1 Discussion of Environmental Evaluation Question 2.18 – Tribal Cultural Resources

The information in this section is based on the *I-215/University Parkway Interchange Improvement Project* HPSR, HRER, *and* ASR (Caltrans 2019a). For purposes of this section, the area of analysis to determine tribal cultural resource impacts is defined as the Project limits.

As discussed above, Caltrans followed the standard industry practice for cultural resource identification and impact analysis as outlined in the Caltrans SER Volume II. This process involved establishing an APE for the Project, conducting background research, performing a cultural resources record search at the CHRIS Information Center, conducting a sacred lands file search through the NAHC, consultation with associated Native American tribes and individuals, and conducting intensive pedestrian field surveys.

**a)** **No Impact.** Assembly Bill (AB) 52 took effect July 1, 2015. AB 52 requires a lead agency to make best efforts to avoid, preserve, and protect tribal cultural resources. The bill states that tribal cultural resources are:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either (i) included or determined to be eligible for inclusion in the California Register of Historical Resources; or included in a local register of historical resources;

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c);
3. A cultural landscape that meets one of the criteria of 1), above, and is geographically defined in terms of the size and scope of the landscape; and/or
4. A historical resource described in PRC 21084.1, a unique archaeological resource described in PRC 21083.2(g), or a non-unique archaeological resource as defined in PRC 21083(h) if it conforms with the criteria of 1), above.

A sacred lands record search was requested from the NAHC on July 21, 2017, to identify all California Native American tribes (as defined in Section 21073 of the PRC) that are traditionally and culturally affiliated with the geographic area of the Project limits and surrounding area. The NAHC responded on July 31, 2017, that there were no known sacred sites within the Project limits. The NAHC provided a list of recommended Native American individuals and or tribes indigenous to the surrounding area.

Caltrans initiated contact pursuant to AB 52 with eight individuals/Tribes on the list who had established an interest in the Project: Gabrieleno Band of Mission Indians – Kizh Nation, Gabrielino/Tongva San Gabriel Band of Mission Indians, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, San Manuel Band of Mission Indians, Serrano Nation of Mission Indians, and Soboba Band of Luiseño Indians. Initial contact with the eight individuals was initiated through a letter from Caltrans District 8 dated July 31, 2017. The first round of follow-up phone calls and emails was conducted on September 28, 2017. A second round of follow-up emails was conducted on October 30, 2017, and a final round of follow-up emails was conducted on November 29, 2017. Based on the analysis as documented in the HRER prepared for the proposed Project, no tribal cultural resources fitting the definition above were identified.

In addition, the NAHC did not indicate the presence of Native American resources in the immediate area within and around the Project limits, and no tribal cultural resources have been identified within the Project limits by the representatives contacted. Prior to the release of the CEQA document for a project, AB 52 requires the lead agency to initiate consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed Project if:

1. The California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and
2. The California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

As of the date of this document, three California Native Tribes identified by the NAHC (Gabrieleno Band of Mission Indians - Kizh Nation, San Manuel Band of Mission Indians, and Serrano Nation of Mission Indians) have requested to consult with Caltrans pursuant to CEQA and PRC 21080.3.1 (i.e., AB 52) regulations. A copy of the Project's ASR was transmitted to the Gabrieleno Band of Mission Indians - Kizh Nation and San Manuel Band of Mission Indians. The Gabrieleno Band of Mission Indians - Kizh Nation did not have further comments on the Project ASR and

recommendations from the San Manuel Band of Mission Indians were incorporated into the Project's ASR. The Serrano Nation of Mission Indians requested to be notified by telephone or by mail if Native American cultural resources are identified or encountered during any phase of the Project. AB 52 consultation concluded between Caltrans and the three California Native American tribes on November 29, 2017.

Although the proposed Project would not cause a substantial adverse change in the significance of a known archaeological resource pursuant to CEQA Guidelines §15064.5 or an identified tribal cultural resource pursuant to PRC §21082.3, there is a low potential for Project-related grading/excavation activities to impact unknown or previously unrecorded archaeological resources.

Previously identified Standard Environmental Commitment Measure CUL-1 requires a stop-work provision to ensure protection of any inadvertently discovered archaeological and/or tribal cultural resources during construction of the project. Previously identified Standard Environmental Commitment Measure CUL-2 requires the implementation of best management practices, including coordination with Native American tribes in the event of the discovery of human remains. With implementation of Standard Environmental Commitment Measures CUL-1 and CUL-2, which includes provisions for the monitoring, discovery and treatment of such resources, no impacts to tribal cultural resources would occur.

**b)** **No Impact.** Refer to Response 2.18a.

## 2.18.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance and minimization measure were identified for the proposed Project for tribal cultural resources. However, Standard Environmental Commitment Measures CUL-1 and CUL-2 have been previously identified under Section 2.5 (Cultural Resources) and will be implemented as part of the proposed Project.

## 2.19 Utilities and Service Systems

| **UTILITIES AND SERVICE SYSTEMS**: Would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities the construction of which could cause significant environmental effects? | ☐ | ☐ | ☒ | ☐ |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | ☐ | ☐ | ☒ | ☐ |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | ☐ | ☐ | ☐ | ☒ |
| d) General solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | ☐ | ☐ | ☒ | ☐ |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | ☐ | ☐ | ☐ | ☒ |

### 2.19.1 Discussion of Environmental Evaluation Question 2.19 – Utilities and Service Systems

For purposes of this section, the area of analysis to determine utility and service system impacts is defined as the Project limits.

**a)** **Less Than Significant Impact.** The proposed Project would not construct any new residential or non-residential structures that could induce growth. The need to construct new or expand waste water treatment, storm water drainage, electric power, natural gas, or telecommunication facilities to accommodate growth will not occur. The Project is a transportation project proposing to construct and reconfigure an existing interchange between I-215 and University Parkway. However, to accommodate the Project, some existing drainage systems would need to be modified to contain the required design flows within the Project limits. Proposed drainage modifications may include relocation of existing systems in case of a conflict. Other modifications may include abandoning some drainage systems or adjusting them with respect to the

finished grade. When feasible, the existing drainage patterns would be maintained on the ramps and University Parkway. The proposed drainage system would be as similar to the existing drainage systems as possible, consisting of grate inlets, curb opening inlets and down drains, overside drains, and storm drain pipes. A less than significant impact is identified for this issue area, and no mitigation measures are required.

**b)** **Less Than Significant Impact.** The proposed Project would not construct any new residential or non-residential structures that could induce growth. Furthermore, the proposed Project is a transportation project proposing to construct and reconfigure an existing interchange between I-215/University Parkway. Although the Project may require water during construction for dust control and new landscaping and hardscapes along the on- and off- ramps, the use of water would be limited, and sufficient water supply is anticipated to be available to serve the Project for the reasonably foreseeable future during normal, dry and multiple dry years. A less than significant impact is identified for this issue area, and no mitigation measures are required.

**c)** **No Impact.** The proposed Project would not construct any new residential or non-residential structures that could induce growth, thereby increasing the demand for wastewater treatment or affect capacity of wastewater treatment facilities. The proposed Project is a transportation project proposing to construct and reconfigure an existing interchange between I-215 and University Parkway. No impact is identified for this issue area, and no mitigation measures are required.

**d)** **Less Than Significant Impact**. During construction of the proposed Project, solid waste would be disposed of using a locally licensed waste hauling services and taken to the Mid Valley Sanitary Landfill located at 2390 North Alder Avenue, Rialto, CA, 92377 (CalRecycle 2019). This facility is approximately 8 miles west of the University Parkway and I-215 interchange. The Mid Valley Sanitary Landfill accepts 7,500 cubic yards per day. The landfill has a remaining capacity of 67,520,000 cubic yards and has an April 4, 2033 cease operation date. Therefore, there is ample landfill capacity to receive the proposed Project's minor amount of solid waste generated by construction and operational activities under the proposed Project. A less than significant impact is identified for this issue area, and no mitigation measures are required.

**e)** **No Impact.** The proposed Project is a transportation improvement project and, therefore, would not generate and solid waste during operation. Although solid waste would be temporarily generated during construction activities, the proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. No impact is identified for this issue area, and no mitigation measures are required.

## 2.19.2 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed for utilities or service system resources.

## 2.20 Wildfire

| **WILDFIRE –** If located in or near state responsibility areas or land classified as very high fire hazard severity zones, would the project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | ☐ | ☐ | ☒ | ☐ |
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | ☐ | ☐ | ☐ | ☒ |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | ☐ | ☐ | ☒ | ☐ |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ☒ |

### 2.20.1 Discussion of Environmental Evaluation Question 2.20 - Wildfire

For purposes of this section, the area of analysis to determine wildfire impacts is defined as the Project limits.

**a)** **Less than Significant Impact.** According to the City's General Plan (City of San Bernardino 2005), the proposed Project is adjacent to an extreme fire hazard area on the east side of University Parkway. This area is primarily occupied by Shandin Hills. The City has four emergency plans including the Emergency Operations Plan, the Local Hazard Mitigation Plan, Mass Care and Shelter Plan, and the Flood Safety Plan. Table 2-9 summarizes the purpose of each plan.

**Table 2-9. Emergency Response Plan Summary**

| Emergency Response Plan | Purpose |
|---|---|
| Emergency Operation Plan | This plan addresses the City's planned response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies; and describes the overall responsibilities of the federal, state, and county entities. |

**Table 2-9. Emergency Response Plan Summary**

| Emergency Response Plan | Purpose |
|---|---|
| Local Hazard Mitigation Plan | This plan aims to reduce and/or eliminate loss of life and property within the City through eliminating risk and providing hazard mitigation. According to the Local Hazard Mitigation Plan, the process encourages communities to develop goals and projects that will reduce risk and build a more disaster resilient community by analyzing potential hazards. After disasters, repairs and reconstruction are completed to restore communities to predisaster conditions. An approved Local Hazard Mitigation Plan also makes the City and its special districts eligible for federal disaster mitigation funds and grants. |
| Mass Care and Shelter Plan | Per the State of California Emergency Plan and Standardized Emergency management System, local governments are the first level of response for meeting the needs of people within its jurisdiction during a disaster by providing emergency care and shelter. This plan identifies community organizations that the City is contracted with to provide emergency relief through emergency human services (i.e., food, shelter, basic health care, counseling, etc.), or temporary shelter available for people made homeless by a natural disaster or emergency |
| Flood Safety Plan | This plan ensures that the most effective and economic allocation or resources for the maximum benefit and protection of the population are provided in a time of emergency. This plan was developed as a result of the thread of flood activities from the 2015 El Niño. The plan provides guidelines through objectives and activities that are to be exercised prior to an emergency related to a significant precipitation event that is forecasted. |

The proposed Project would improve an existing interchange and would not substantially impair or impede the implementation of these emergency response plans. During construction, the contractor, SBCTA, and Caltrans would coordinate with the City on the construction schedule, potential delays, and temporary closures as identified through Minimization Measure TR-1: Preparation of a Transportation Management Plan. Once constructed, the proposed Project would allow for more efficient flow of traffic through the interchange including for emergency vehicles and would not affect response times or service ratios. With implementation of Minimization Measure TR-1, impacts associated with this issue area would be a less than significant impact.

**b)** **No Impact.** According to the City's General Plan (City of San Bernardino 2005a), the proposed Project is within a high wind area and within A IIIb area for slope stability and major landslides. A IIIb area is defined as an area of moderate relief for slope stability and in a lower to moderate risk of landslide susceptibility. A IIIb area may also contain small to large rotational slides, debris slides and combination of superficial slides and flows. The flow of the landslide susceptibility is also approximated with the City's General Plan (City of San Bernardino 2005a) and shows that the proposed

Project is within the pathway of a potential landslide. However, as stated previously, the proposed Project is a transportation project improving an existing interchange. The proposed Project does not propose to develop land for residential, commercial, or industrial uses that may catalyze population and employment growth. Therefore, there would be no Project occupants as a result of Project implementation that would be exposed to pollutant concentrations from a wildfire or an uncontrolled spread of a wildfire under the proposed Project. No impact is identified for this issue area.

**c)** **Less than Significant Impact.** The proposed Project would improve an existing interchange by implementing a DDI that includes a protected pedestrian pathway within the DDI's core and by implementing new Class II bike lanes that would weave through the DDI. The protected pedestrian pathway would replace the existing northbound and southbound sidewalks below the I-215 overcrossing. The proposed Project would not exacerbate fire risk or result in ongoing impacts on the environment during operation. However, as the Project is immediately adjacent to an extreme fire hazard area, during construction of the DDI under the proposed Project, temporary impacts may exacerbate fire risk in terms of accessibility for emergency vehicles. This impact would be addressed by Minimization Measure TR-1, which require that a TMP be utilized during construction to minimize impacts on motorist and emergency vehicles.

In addition, due to the nature of construction activities that may occur (e.g., use of grinding, welding, and other spark-inducing activities) adjacent to areas with vegetation, there is the potential for exposure of people or structures to a wildland fire event. However, this potential is reduced when Minimization Measure BIO-4 is incorporated. Minimization Measure BIO-4 requires coordination with the San Bernardino County Fire Authority during fire season when construction activities are being conducted adjacent to any vegetation in the area. The minimization measure also requires the use of shields, protective mats, and other fire preventive methods during grinding, welding, and other spark-inducing construction activities. With implementation of the Minimization Measures BIO-4 and TR-1, impacts associated with this issue area would be less than significant.

**d)** **No Impact.** As stated previously, the proposed Project is within a IIIb area for slope stability and major landslides. The flow of the landslide susceptibility is also approximated with the City's General Plan (City of San Bernardino 2005a), and it shows that the proposed Project is within the pathway of a potential landslide. However, because the proposed Project is a transportation project improving an existing interchange, the proposed Project would not newly expose or exacerbate the existing risk to people or structures, which include downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact is identified for this issue area.

## 2.20.2 Avoidance, Minimization, and/or Mitigation Measures

Please refer to Section 2.4 (Biological Resources) for Minimization Measure BIO-4 and Section 2.17 (Transportation) Minimization Measure TR-1. No other avoidance, minimization, and/or mitigation measures are proposed for this issue area.

## 2.21 Mandatory Findings of Significance

| MANDATORY FINDINGS OF SIGNIFICANCE | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|---|---|---|---|
| a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | ☐ | ☐ | ☒ | ☐ |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | ☐ | ☐ | ☒ | ☐ |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ☐ | ☒ | ☐ |

### 2.21.1 Discussion of Environmental Evaluation Question 2.21 – Mandatory Finding of Significance

**a) <u>Less than Significant Impact.</u>**

**Biological Resources**

As discussed in Section 2.4, Biological Resources, the BSA does not exhibit the proper combination of suitable habitat and soils to support any special-status plant species. The Project limits are heavily disturbed and consists primarily of urban built-up, CBS, CBS (Disturbed), and non-native grassland communities at the southern end of the Project area.

Habitat to support nesting for birds protected under the MBTA occurs throughout the BSA. There is the potential for CAGN to be found in the Project limits and the surrounding area within the CBS and CBS (Disturbed) habitats. Additionally, BUOW, San Diego black-tailed jackrabbit, and Los Angeles pocket mouse suitable habitat has been found within and surrounding the Project limits, CBS, CBS (Disturbed), and non-native grassland communities at the southern end of the BSA. None of these species were observed within the BSA during the field survey. There is also potential for three special-status bat species (pallid bat, California western mastiff bat, and

big free-tailed bat) to forage within suitable habitat (ruderal and remnant RSS) in the BSA. Temporary impacts as a result of the proposed Project would be avoided and minimized by the incorporation of Minimization Measures BIO-1 through BIO-9, identified in Section 2.4.2.

**Historical Resources**

As discussed in Section 2.5, Cultural Resources, one historic building was found within the APE, the Scottish Rite Temple located at 4400 Varsity Avenue. The San Bernardino Scottish Rite of Freemasonry Temple was constructed in 1970 and is associated with the development of the Scottish Rite of Freemasonry in Southern California in the twentieth century; however, there are other temples that better represent this organization and its mission including the temples in Pasadena, Long Beach, and Los Angeles. The Scottish Rite of Freemasonry Temple design reveals simplistic stucco walls, modern pilasters, mansard roof, and simplistic interpretation of a classical revival style entryway do not convey the temple aesthetic that the Long Beach, Pasadena, and Los Angeles temples do with their detailed and grandeur designs. The building has been determined ineligible under Criterion A/1, B/2, C/3; under Criterion D/4, the building has not yielded, nor is it likely to yield information important to the study of local, state, or national history. Therefore, the building is not eligible for listing in the NRHP or the CRHR and is not a historical resource for the purpose of CEQA.

**Cultural/Archaeological/Paleontological Resources**

As discussed in Section 2.5, Cultural Resources, it is anticipated that ground-disturbing activities associated with the proposed Project would largely be confined to previously disturbed sediments. As such, the possibility of encountering subsurface cultural resources during construction is low. Standard Environmental Commitment Measure CUL-1 is proposed in the event that cultural resources are inadvertently encountered during excavation activities. With implementation of Standard Environmental Commitment Measure CUL-1, no impacts associated with archaeological and tribal cultural resources are anticipated to occur.

As discussed in Section 2.7, Geology and Soils, it is soil deposits within the Project limits have a low paleontological sensitivity between 0 to 5 feet below ground surface and a high paleontological sensitivity at depths greater than 5 feet below ground surface. Construction of the proposed Project improvements would mostly require surface ground disturbance activities and will primarily be restricted to areas of previously disturbed areas. However, the proposed Project would require excavation activities of up to 15 feet below ground surface to install traffic signal poles and overhead signage foundations. With implementation of Standard Environmental Commitment Measures PAL-1 through PAL-3, no impacts to paleontological resources are anticipated to occur.

**b)** **Less than Significant Impact.** Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative effect assessment analyzes the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

The purpose of the proposed Project is to support planned regional growth and proposed local-area projects and relieve traffic congestion and related GHG emissions

by providing improved signalized intersection operational efficiency through the interchange area, as well as improve vehicular, bicycle, pedestrian and transit access through the freeway ramp intersections accommodating all modes of transportation (Complete Streets). The following discussion of potential cumulative impacts is broken down by issue area presented within this environmental checklist. The following resource areas are anticipated to have no cumulative impact, as these issue areas have no impact as a result of the proposed Project.

- Agriculture and Forest Resources
- Cultural/Tribal Cultural/Paleontological Resources
- Energy
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Recreation
- Utilities and Service Systems

Table 2-10 identifies other current and reasonably foreseeable projects that, in combination with the proposed Project, could potentially make a considerable contribution to cumulative environmental impacts.

**Table 2-10. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis**

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| The 5 Willow Crk Bridge Drainage (EA 1H340) | Caltrans and City of San Bernardino | Individual Portland Cement Concrete (PCC) slab replacement, curb ramp upgrades, and replacing asphalt with Jointed Plain Concrete Pavement (JPCP) paving at ramp terminals. | Maintenance Design Review – Under Review by Caltrans |
| Campus Pkwy-Pepper/Linden Drive Extension From Kendall To I-215 Fwy (FTIP Sbd59023) | Caltrans and City of San Bernardino | Construct a four-lane roadway between Kendall Drive and I-215. No opening year is listed in the RTP, and no funding sources have been identified for this project. | Anticipated Project Completion: January 2023 |
| I-215 and Campus Parkway Interchange Project (RTP 4M01045) | Caltrans, SBCTA | Construct a new interchange at I-215 and Campus Parkway. The opening year is listed as 2040 in the RTP, but currently no funding sources have been identified for this project. | Anticipated Opening Year: 2040 |

**Table 2-10. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis**

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| I-210 FOC, CCTV and CMS Improvements (EA 0E551) | Multiple | Install fiber optic communication (foc), closed circuit television cameras (cctv) and changeable message sign (cms) along I-210 from I-215 to Victoria Avenue and along I-10 from Alabama Street to Colton overcrossing. | Anticipated Phase 1 Construction Completion: March 2019 |
| Alere Warehouse at Cajon Boulevard Project | County of San Bernardino | Construct and operate a 321,495 square-foot warehouse building, including 20,000 of office space. | Preparing Final Environmental Document |
| Xtreme Pallets Project | County of San Bernardino | Construct and operate a 20,000 square-foot wood pallet manufacturing facility with indoor and outdoor storage. | Draft Environmental Document (Published 2/14/2019) |
| Widening of H Street between Kendall Drive and 40th Street Project | City of San Bernardino | Widen and upgrade H Street between Kendall Drive and 40th Street to two traffic lanes in each direction with pavement, parking, curb and gutter, 6-foot-wide sidewalks and street light improvements. | Final Approved IS(Mitigated Negative Declaration [MND]); Anticipated Construction Completion: May 2019 |
| 2600 Cajon Boulevard Warehouse Project | City of San Bernardino | Construct one warehouse building at 24th Street and south of Cajon Boulevard, which will include 267,047 square feet of warehouse area, up to 11,000 square feet of offices uses, 32 loading docks, 250 automobile parking stalls, 114 trailer stalls, and 1.75 acre of landscaping within the parking areas and along the project perimeter. | Draft Environmental Document |

**Table 2-10. Current Reasonably Foreseeable Projects Considered in Cumulative Impact Analysis**

| Project | Jurisdiction | Overview | Status |
|---|---|---|---|
| Widening Of Fortieth Street From Johnson Street To Electric Avenue Project | City of San Bernardino | Widen 40th Street between Johnson Street and Electric Avenue from two lanes to four lanes (two travel lanes in each direction). | Phased;<br>Phase 1 Completion: December 2018<br>Phase 2: Anticipated Construction: January 2020-July 2020 |
| Ridge One Industrial Development Project | City of San Bernardino | Construct two industrial warehouse buildings up to 726.000 square feet on 47.4 acres of land consistent with Cajon Creek Specific Plan EIR (City of San Bernardino 1993). | Approved by Planning Division July 2017 |

### Aesthetics

The Project limits are not located within a scenic vista, scenic highway, nor are there any scenic highways located within the vicinity of the Project limits. According to the San Bernardino General Plan, the San Bernardino Mountains provide a scenic resource visible from the Project limits. Project design under the proposed Project does not include any vertical changes or new structures that would limit views of the San Bernardino Mountains from the Project limits or surrounding area. As discussed in Section 2.1, Aesthetics, the proposed Project would be constructed to be consistent with the City's General Plan, University District Specific Plan, and Caltrans Complete Streets Program. Projects identified within Table 2-10 are not considered cumulatively considerable or significant given the urban built-up nature of area surrounding the Project limits and vicinity.

### Air Quality

The proposed Project is a transportation project that would not construct new homes or businesses, nor would the proposed Project increase traffic volumes along I-215 or University Parkway. As a result, it is anticipated that the proposed Project would not have an effect on the regional criteria pollutant, Mobile Source Air Toxics (MSAT), or GHG emissions during operation.

During construction, the proposed Project would require site preparation and roadway construction including, but not limited to, clearing, cut and fill operations, grading, removing and improving existing roadways, and paving new roadway surfaces. It is expected that construction-related activities, such as excavation, grading, or hauling, would cause the release of particulate emissions, such as dust. Emissions are also anticipated from construction equipment powered by gasoline and diesel engines. A

TMP will be incorporated as a part of the Project to minimize the traffic delays and impacts as a result of construction. Project construction is temporary and is anticipated to last less than 5 years. Minimization Measures AQ-1 through AQ-10 will be implemented as a part of the proposed Project to minimize air quality impacts during construction.

The proposed Project may be constructed during the same time as the Widening Of 40th Street from Johnson Street to Electric Avenue Project. According to the Draft IS/MND prepared for the Widening Of 40th Street from Johnson Street to Electric Avenue Project, the air quality impacts are less than significant and are not cumulatively considerable and would not result as a cumulative impact with the proposed Project.

**Biological Resources**

As discussed in Section 2.4, Biological Resources, and in Response 2.21a, the proposed Project is not anticipated to have significant impacts on biological resources with incorporation of Avoidance and Minimization Measures BIO-1 through BIO-9. Implementation of the projects in Table 2-10 may result in the loss of land containing habitat or potential habitat for sensitive species or plant communities. However, the environmental documentation for these projects, as well as the proposed Project, have identified less than significant impacts on biological resources. All projects would have to comply with applicable federal, state, and local habitat management plans, regulations, policies, and laws, such as the MBTA to avoid, minimize, or mitigate potential impacts on biological resources. The anticipated impacts from the proposed Project, as well as projects within the vicinity of this Project, are not likely to result in cumulatively considerable impacts on biological resources.

**Hazards and Hazardous Materials**

As discussed in Section 2.9, Hazards and Hazardous Materials, hazardous materials and wastes that would be used or generated during construction of the proposed Project are considered to pose a potential short-term construction impact. These materials include lubricants (both grease and oils), petroleum fuels, cleaning solvents, and paint. Hazardous wastes generated during construction would require proper disposal and could include used oil and sediment from vehicle washing. Incorporation of Avoidance and Minimization Measures HAZ-1 through HAZ-7 would avoid and minimize the potential hazards and hazardous materials impacts associated with the proposed Project. The proposed Project, in conjunction with the surrounding projects identified in Table 2-10, could expose the people to hazardous materials during construction of the proposed Project. However, the closest project to the Project limits that may be constructed at the same time is over 2 miles east. Both projects, and other future projects proposing industrial uses, are required to follow project-specific requirements and avoidance, minimization, or mitigation measures to avoid, minimize, or mitigate impacts on humans and the environment from hazards or hazardous materials. Therefore, cumulatively considerable impacts are not anticipated as a result of the proposed Project.

**Hydrology and Water Quality**

The proposed project would utilize as much of the existing drainage as possible to limit the changes to existing drainage. The closest project is approximately 0.5 mile south of the Project limits. Due to topography of the area surrounding the Project limits and the proposed drainage and treatment BMPs of the proposed Project, storm water

would be treated within the Project limits or follow existing drainage. Additionally, the proposed Project does not drain to a 303(d) listed water body. Minimization Measures WQ-1 through WQ-3 identified in Section 2.10.2, and Measure HAZ-6 in Section 2.9.2, will minimize the potential effects on hydrology and water quality. The proposed Project would not result in cumulatively considerable impacts.

**Noise**

Section 2.13, Noise, summarizes the noise impacts as a result of the proposed Project. Cumulatively considerable impacts are not likely, as the nearest project is over 2 miles away from the Project limits. All other projects identified in Table 2-10 are not anticipated to be in construction as the same time as the proposed Project.

**Transportation**

The purpose of the proposed Project is to relieve traffic congestion and related GHG emissions by providing an improved and efficient signalized intersection, as well as improve vehicular, bicycle, and pedestrian access. During construction, a TMP (TR-1 identified within Section 2.17.2) will be implemented to minimize traffic related impacts for motorists, emergency vehicles, bicyclists, and pedestrians within the Project limits and surrounding area During operation, the proposed Project would improve traffic by reducing collisions related to congestion by making the intersection operations more efficient for commuters by improving both ramp intersections of the current interchange, allowing more efficient left-turn and right-turn movements at ramp terminals. However, the proposed Project is not anticipated to increase traffic volumes or increase capacity. The projects identified within Table 2-10 have not been identified as volume increasing projects, and, therefore, no cumulative considerable impacts are anticipated.

**Wildfire**

The Project limits are immediately adjacent to an area identified as a severe fire hazard risk, primarily occupied by the Shandin Hills. As the proposed Project is a transportation project, it would result in the construction of roads with the potential to exacerbate fire hazards and spread of wildfires. The proposed Project would primarily replace roadways in their existing locations; however, the proposed Project would result in approximately 1.5 acre of additional impervious surfaces. The Widening of 40th Street from Johnson Street to Electric Avenue Project is located on the opposite side of the Shandin Hills but not within the severe fire hazard zone. Construction for the Widening of 40th Street from Johnson Street to Electric Avenue Project and the proposed Project have the potential to overlap; however, cumulatively considerable impacts are not anticipated.

**c)** **Less than Significant Impact.** Any effects related to construction of the Project would be temporary and short term and would not result in any long-term or permanent effects on human beings. All potential effects that could result in substantial exposure of persons to hazards during construction of the proposed Project are addressed by the analysis found in Sections 2.1 through 2.20 of this IS with avoidance and/or minimization measures included in applicable sections.

Operation of the Project would not result in the exposure of persons to any substantially adverse natural or human-made hazards that could directly or indirectly cause substantial adverse effects on human beings, such as geologic hazards, air emissions, noise, hazardous materials, or flooding. There would not be any long-term environmental effects, which would cause substantial adverse effects on human

beings, either directly or indirectly. Therefore, a less than significant impact has been identified for this issue area.

# CHAPTER 3 CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride ($SF_6$), and various hydrofluorocarbons (HFCs). $CO_2$ is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated $CO_2$.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

## 3.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

### Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.[1] This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability."[2] Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

[1] https://www.fhwa.dot.gov/environment/sustainability/resilience/

[2] https://www.sustainablehighways.dot.gov/overview.aspx

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA[3] in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. The current standards require vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. EPA and NHTSA are currently considering appropriate mileage and GHG emissions standards for 2022–2025 light-duty vehicles for future rulemaking.

NHTSA and EPA issued a Final Rule for "Phase 2" for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce $CO_2$ emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

### State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

AB 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in

[3] U.S. EPA's authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions.

an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$).[4] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

[4] GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). $CO_2$ is the most important GHG, so amounts of other gases are expressed relative to $CO_2$, using a metric called "carbon dioxide equivalent" ($CO_2e$). The global warming potential of $CO_2$ is assigned a value of 1, and the GWP of other gases is assessed as multiples of $CO_2$.

Senate Bill 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

Senate Bill 150**,** Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

Executive Order B-55-18, (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

## 3.2 Environmental Setting

The existing I-215/University Parkway Interchange serves as a main point of access for California State University, San Bernardino (CSUSB) students, faculty, and visitors. As described in Chapter 1, the area immediately adjacent to the Project limits is predominately developed and generally consists of a mix of residential, light industrial, and commercial land, including gas stations, restaurants, motels, retail stores, self-storage, and a tutoring center. Local bus route and stops are located along University Parkway. The Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) guides transportation and housing development in the project area. San Bernardino County's Non-Motorized Transportation Plan and the County General Plan contain goals and policies related to improving bicycle and pedestrian access and infrastructure and interchange operations.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

### National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of $CO_2$, $CH_4$, $N_2O$, HFCs, perfluorocarbons, $SF_6$, and nitrogen trifluoride. It also accounts for emissions of $CO_2$ that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store $CO_2$ (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81% consist of $CO_2$, 10% are $CH_4$, and 6% are $N_2O$; the balance consists of fluorinated gases (EPA 2018a).[5] In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

[5] U.S. Environmental Protection Agency. 2018. Inventory of U.S. Greenhouse Gas Emissions and Sinks. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

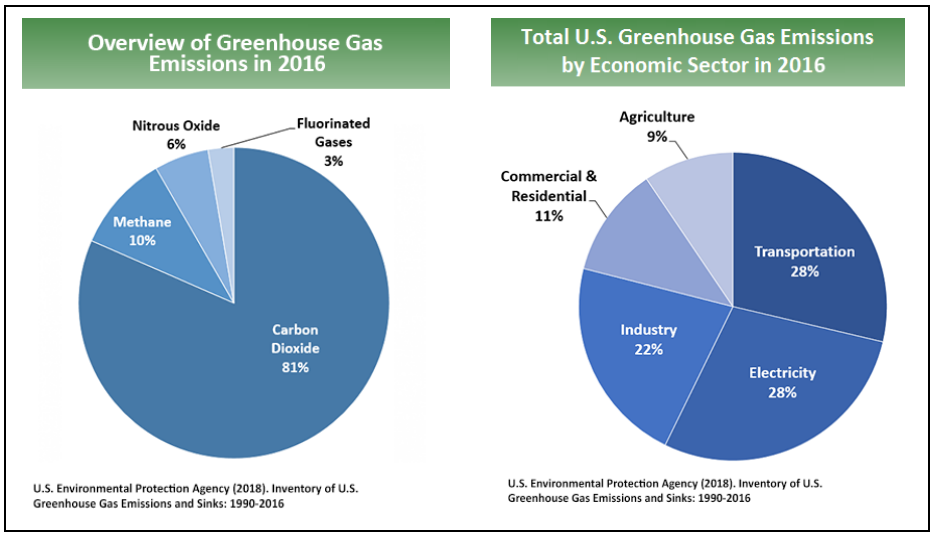


**Figure 3-1. U.S. 2016 Greenhouse Gas Emissions**

## State GHG Inventory

CARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2018 edition of the GHG emissions inventory found total California emissions of 429 $MMTCO_2e$ for 2016, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions have declined from 2000 to 2016 despite growth in population and state economic output.[6]

[6] 2018 Edition of the GHG Emission Inventory (July 2018). https://www.arb.ca.gov/cc/inventory/data/data.htm

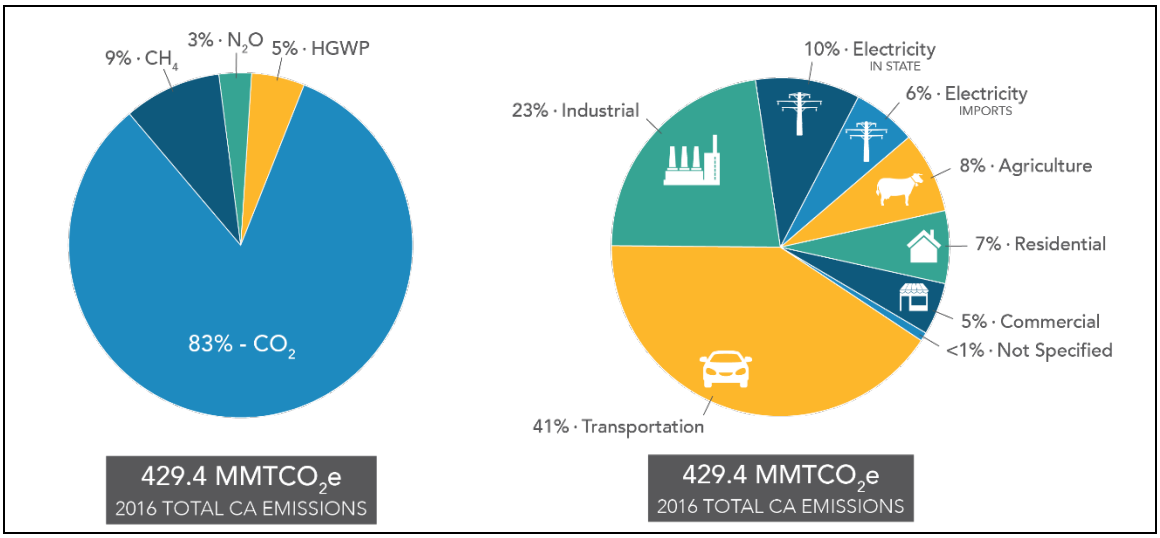


**Figure 3-2. California 2016 Greenhouse Gas Emissions**

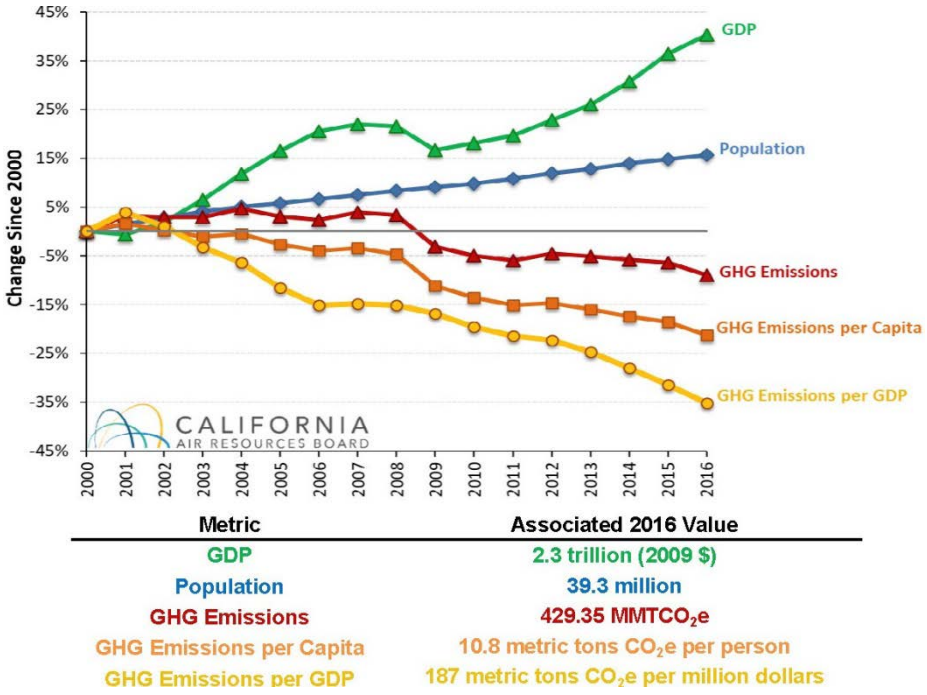


**Figure 3-3. Change in California GDP, Population, and GHG Emissions since 2000**

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target

established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

### Regional Plans

CARB sets regional targets for California's 18 MPOs to use in their RTP/SCSs to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in SCAG's 2016–2040 RTP/SCS. The regional reduction targets for SCAG as of October 21018 are 8 percent by 2020 and 19 percent by 2035.

San Bernardino County has a Non-Motorized Transportation Plan that encourages increased bicycle and pedestrian access and improved safety for those users. The City of San Bernardino General Plan contains policies related to a well-integrated bike and pedestrian network; rehabilitation of all components of the circulation system; multimodal facilities; and Complete Streets (see Table 2-2 in Section 2.11, Land Use and Planning).

## 3.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are $CO_2$, $CH_4$, $N_2O$, and HFCs. $CO_2$ emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of $CH_4$ and $N_2O$ are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130)).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

## 3.4 Operational Emissions

The purpose of the proposed Project is to improve operations and safety at the interchange. Implementing the Project would not add travel lanes or increase vehicle miles traveled or traffic volumes along I-215, University Parkway, or any of the highway ramps. Improving access for bicycles and pedestrians may encourage more use of these non-motorized modes of transportation and reduce use of single-occupant vehicles. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

## 3.5 Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced

through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The construction emissions were estimated for the Project using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0.0. While the model was developed for Sacramento conditions in terms of fleet emission factors, silt loading, and other modeling assumptions, it is considered adequate for estimating road construction emissions by the SCAQMD in its CEQA guidance and is used for that purpose in this analysis. Construction-related emissions for the proposed Project are presented in Table 3-1. The emissions presented are based on the best information available at the time of calculations and assume that all improvements are anticipated to begin in 2020 and end in 2020. Default equipment assumptions for the Road Construction Emissions Model were used in developing the emissions estimates. The emissions listed in Table 3-1 represent the metric tons of $CO_2e$ generated by each phase of construction and the total construction emissions that would be generated by Alternative 2.

**Table 3-1. Construction Emissions for Roadways**

| Project Phase | $CO_2e$ (tons/phase) |
|---|---|
| Grubbing/land clearing | 72.41 |
| Grading/excavation | 931.33 |
| Drainage/utilities/sub-grade | 469.82 |
| Paving | 108.72 |
| Peak phase | 931.33 |
| Project total | 1,582.29 |

Notes:
$CO_2e$=carbon dioxide equivalent

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. In addition, a transportation management plan (TMP) will be implemented during construction to minimize delays and idling.

## 3.6 CEQA Conclusion

While the proposed project will result in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. The proposed project

does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

## 3.7 Greenhouse Gas Reduction Strategies

### Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California* (Figure 3-4).

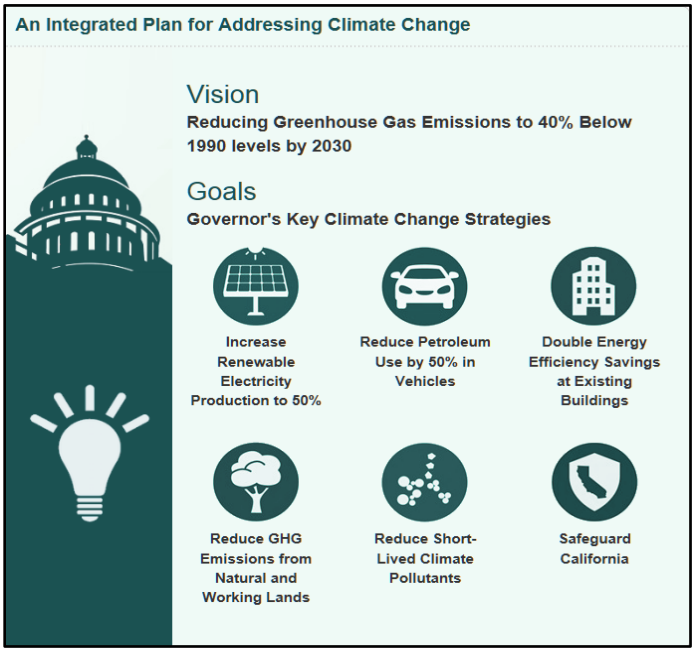


**Figure 3-4. California Climate Strategy**

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that we build on our past successes in reducing criteria and toxic air pollutants from transportation and goods movement activities. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030.

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove

carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

### Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30- 15, issued in April 2015, and SB 32 (2016), set a new interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

#### *California Transportation Plan (CTP 2040)*

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with $CO_2$ reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

#### *Caltrans Strategic Management Plan*

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT per capita
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

#### *Funding and Technical Assistance Programs*

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

#### *Caltrans Policy Directives and Other Initiatives*

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into

Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

## 3.8 Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- Landscaping reduces surface warming, and, through photosynthesis, decreases $CO_2$. Landscaping would be provided, where necessary, within the corridor to provide aesthetic treatment, replacement planting, or mitigation planting for the Project. The landscape planting would help offset any Project $CO_2$ emissions.
- The Project would incorporate the use of energy-efficient lighting, such as light-emitting diode traffic signals and street lights, to the extent feasible. Light-emitting diode lights consume 10 percent of the electricity of traditional lights, which would also help reduce the Project's $CO_2$ emissions.
- The Project will improve bicycle and pedestrian infrastructure and incorporate Complete Streets elements to support these alternative modes of travel and make them safer to use. This could reduce the number of trips made in motor vehicles.
- The Project purpose is to improve operational efficiency at the intersection. Reducing delays and improving traffic flow may help reduce GHG emissions from idling vehicles.
- Caltrans Standard Specifications for air pollution control will minimize equipment GHG emissions during construction.
- A TMP (Minimization Measure TR-1) would minimize traffic delays and associated idling emissions.

SBCTA, in close coordination with Caltrans, has provided additional avoidance and minimization measures to address potential short-term and long-term Project-specific GHG emissions and impacts on climate change under CEQA, prior to the circulation of the draft ED.

**GHG-1** **Truck Idling.** During construction, SBCTA will ensure that idling will be limited to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

**GHG-2** **Truck Trips.** During construction, SBCTA will ensure that truck trips are scheduled outside of peak morning and evening commute hours.

**GHG-3** **Recycled Materials.** During construction, SBCTA will ensure that construction waste is minimized and the use of recycled materials maximized; which reduces consumption of raw materials, reduces landfill waste, and encourages cost savings.

**GHG-4** **Potable Water.** During construction, SBCTA will ensure that measures to reduce consumption of potable water will be incorporated.

**GHG-5** **On-Site Recycled Materials.** During construction, SBCTA will ensure that on-site recycling of existing project features is encouraged, such as Metal Beam

Guard Railing, light standards, sub-base granular material, or native material that meets Caltrans specifications for incorporation into new work.

**GHG-6** **Limit Transport of Earthen Materials.** During construction, SBCTA will ensure that earthwork balance be implemented in order to reduce the need for transport of earthen materials by balancing cut and fill quantities.

**GHG-7** **Reduce Electric Lighting.** During construction, SBCTA will ensure that the need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights is reduced.

**GHG-8** **Improve Energy Efficiency.** SBCTA will ensure that measures are incorporated to improve energy efficiency will be implemented as part of the Project.

**GHG-9** **Improve Water Efficiency.** SBCTA will ensure that measures to improve water efficiency (including but not limited to landscaping and building operations) will be implemented as part of the Project.

**GHG-10** **Complete Streets.** SBCTA will ensure that Complete Streets components are implemented as part of the Project.

**GHG-11** **Solar Powered Highway Facility Components.** SBCTA will ensure that installation of solar to supply power to highway facility components or buildings will be implemented as part of the Project.

**GHG-12** **Native Landscaping.** SBCTA will ensure that native plants and vegetation (replacing more vegetation than was removed) will be integrated into the project design to increase carbon sequestration.

**GHG-13** **Green Infrastructure.** SBCTA will ensure that green infrastructure (planted areas) instead of gray (concrete) storm water facilities, will be implemented as part of the Project.

**GHG-14** **Increased Life-Span Pavement Materials.** SBCTA will ensure the design and installation of long-life pavement structures to minimize life-cycle costs. Consider future climate conditions in decisions. For example, areas that are expected to experience increased temperatures and extreme heat days may have different pavement needs than areas expecting more frequent freezing temperatures.

## 3.9 Adaptation Strategies

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

### Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGRCP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime."

U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions."[7]

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014)[8] established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems.

FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels.[9]

### State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's latest effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.

[7] https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm
[8] https://www.fhwa.dot.gov/legsregs/directives/orders/5520.cfm
[9] https://www.fhwa.dot.gov/environment/sustainability/resilience/

- Resilience is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality.2 Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.[10]

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure

[10] http://www.opc.ca.gov/updating-californias-sea-level-rise-guidance/

planning, design, and implementation processes to address the observed and anticipated climate change impacts.

## Caltrans Adaptation Efforts

### *Caltrans Vulnerability Assessments*

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Sea-Level Rise

The proposed Project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts on transportation facilities due to projected sea-level rise are not expected.

Wildfire

The proposed Project is not within a fire hazard area as determined in the City's general plan and the CalFire 2007 Fire Hazard Severity Zone map. However, portions of the southern Project limits are adjacent to a very high fire hazard severity area.

Minimization Measure BIO-4 specifies use of fire prevention methods and that appropriate firefighting equipment be available onsite when construction work will be conducted adjacent to any vegetation during the fire season (as identified by the San Bernardino County Fire Authority) to help minimize the potential for human-caused wildfires. As described in Section 2.9.1, BIO-4 also requires the Project to comply with the City of San Bernardino's Emergency Operations Plan during construction and operation, consistent with local, state, and federal guidelines.

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# CHAPTER 4 COMMENTS AND COORDINATION

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, the level of analysis required, and identify potential impacts, mitigation measures, and related environmental requirements. Agency consultation and public participation for this Project have been accomplished through a variety of formal and informal methods, including monthly Project Development Team (PDT) meetings, interagency coordination meetings, and consultation with interested parties. This chapter summarizes Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination (Table 4-1).

## 4.1 Coordination with Resource Agencies

**Table 4-1. Coordination with Resource Agencies**

| Consulting Party | Timing | Activity |
|---|---|---|
| Local Historical Society / Historic Preservation Group | May 4, 2018 | The City of San Bernardino Historical and Pioneer Society in San Bernardino was contacted by e-mail on May 4, 2018, regarding the proposed Project. A follow-up email was sent on August 31, 2018 and a follow-up phone call was conducted on September 7, 2018. To date, no response has been received. |
| Native American Heritage Commission | July 21, 2017 | The NAHC was contacted on July 21, 2017, to elicit pertinent cultural resource information available in the Sacred Lands File. The NAHC responded on July 31, 2017, that the Sacred Lands File search for the Project was completed with negative results. The NAHC provided a list of eight Native American contacts within the region for coordination efforts. |

## Table 4-1. Coordination with Resource Agencies

| Consulting Party | Timing | Activity |
|---|---|---|
| Native American Tribes, Groups, and Individuals | **AB 52**<br>July 31, 2017<br>September 28, 2017<br>October 30, 2017<br>November 29, 2017 | AB 52 consultation letters were mailed via United States Postal Service certified mail on July 31, 2017 to the eight listed NAHC Native American contacts. The first round of follow-up phone calls and emails was conducted on September 28, 2017. A second round of follow-up emails was conducted on October 30, 2017 and a final round of follow-up emails was conducted on November 29, 2017.<br>As of November 29, 2017, three California Native Tribes identified by the NAHC (Gabrieleno Band of Mission Indians - Kizh Nation, San Manuel Band of Mission Indians, and Serrano Nation of Mission Indians) have requested to consult with Caltrans pursuant to CEQA and PRC 21080.3.1 (i.e., AB 52) regulations.<br>A copy of the Project's ASR was transmitted to the Gabrieleno Band of Mission Indians - Kizh Nation and San Manuel Band of Mission Indians. The Gabrieleno Band of Mission Indians - Kizh Nation did not have further comments on the Project ASR and recommendations from the San Manuel Band of Mission Indians were incorporated into the Project's ASR. The Serrano Nation of Mission Indians requested to be notified by telephone or by mail if Native American cultural resources are identified or encountered during any phase of the Project. AB 52 consultation concluded between Caltrans and the three California Native American tribes on November 29, 2017. |
| Project Development Team | Ongoing | A PDT was identified to ensure collaborative communication among the stakeholders, which includes representatives from Caltrans, SBCTA, and the City of San Bernardino. PDT meetings have occurred on a monthly basis at Caltrans District 8 offices and are attended by the engineering and environmental consultant teams from the City and Caltrans. The larger PDT Team consists of engineers, environmental generalists, biologists, archaeologists, paleontologists, and air quality and noise specialists. Monthly PDT meetings are still ongoing. Additional details regarding future project development team meetings will be included within this section when available. |

No consultation with resource agencies has been initiated for the Project. When consultation with resource agencies begins, this section will be updated accordingly. Table 1-2 includes permits, reviews, and approvals that will be required prior to the construction of the proposed Project.

### 4.1.1 Community Interaction

Caltrans has been involved since the initiation of the PSR-PDS and will continue to provide oversight and feedback as active members of the PDT for the PA/ED, Final Design and construction phases of the Project. During the PA/ED phase, the FHWA has also expressed interest in staying involved in the development of the Project since this would be one of the first DDIs in California.

Meetings between Caltrans, SBCTA, and CSUSB have been held regularly to discuss the status of the Project. A public open house will be held as part of the community outreach, and all comments from the public will be either documented by a court reporter or received in writing. During the same event, the Project will be explained to the public so they know what to expect in terms of the direction of traffic and how to navigate through the DDI.

During the PSR-PDS, bicycle advocacy groups were contacted, including the Inland Empire Biking Alliance, Redlands Water Bottle Transit Company, and Ride Yourself Fit, to provide them with information about the proposed Project.

### 4.1.2 Public Hearing Process

Meetings between representatives from Caltrans, SBCTA, and CSUSB have been held to discuss the status of the Project. A public open house will be held as part of the community outreach, and all comments from the public will be either documented by a court reporter or received in writing. During the same event, the Project will be explained to the public so they know what to expect in terms of the direction of traffic and how to navigate through the DDI.

## 4.2 Public Circulation

This Draft IS and a Public Notice will be distributed to local, and regional agencies; and utility providers affected by the proposed Project. In addition, property owners directly affected by the Project will also be provided with a Public Notice of the document.

Once the proposed Draft IS is distributed for public review, a 30-day public review period will commence. The document will also be available for public review at local area libraries, the Caltrans District 8 Office and the SBCTA Office. Chapter 6, Distribution List, provides additional information about where and to whom the document was distributed to.

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# CHAPTER 5 LIST OF PREPARERS

This IS was prepared by Caltrans District 8, and SBCTA with assistance from the consultant team.

The following individuals were involved in the preparation of this IS.

## 5.1 Caltrans, District 8

Emad Makar, Project Manager

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Dan Gallagher, Associate Environmental Planner, Environmental Studies Branch D

Hannah Duarte, Environmental Planner, Environmental Studies Branch D

Olufemi Odufalu, Senior Transportation Engineer, Air Quality Branch

Andrew Walters, Senior Environmental Planner, Environmental Support/Cultural Studies

Gary Jones, Prinicipal Investigator, Prehistoric Archaeology

Craig Wentworth, Senior Environmental Planner, Biological Studies and Permits

Joshua Jaffery, Associate Environmental Planner, Biological Studies and Permits

Shawn Oriaz, Branch Chief, Environmental Studies Branch C

Bahram Karimi, Associate Environmental Planner/Paleontology Coordinator

Rose Bishop, Landscape Architect, Landscape Architecture

Miriam Bishop, Landscape Architect, Landscape Architecture

Michael Beauchamp, Design Oversight

## 5.2 San Bernardino County Transportation Authority

Paul Melcoloton, Project Manager

Dennis Saylor, Project Manager

## 5.3 HDR Engineering, Inc.

Mark Hager, Project Manager

Julian Hernandez, Deputy Project Manager/Engineering Lead

Angie Kung, Environmental Section Manager/Environmental Lead

Kelly Czechowski, Senior Environmental Planner

Uyenlan Vu, Senior Environmental Planner

Keith Lay, Senior Air Quality Specialist

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Sarah Barrera, Senior Biologist

Doug Smith, Traffic Engineering Lead

June Duan, Senior Traffic Engineer/Analyst

April Cottini, Senior Landscape Architect

Carmen Schofield, Visual Design Manager

Tyra Gentry Visualization Senior Designer

Abel Faz, Visualization Designer

Jade Dean, GIS Specialist

Renee Stueber, Editor

## 5.4 Applied Earthworks

Joan George, Archaeologist

Annie McCausland, Architectural Historian

Christopher Shea, Associate Paleontologist

Chris Shi, Associate Paleontologist

Heather Clifford, Associate Paleontologist

# CHAPTER 6 DISTRIBUTION LIST

The Draft IS with Proposed ND and a Notice of Availability will be distributed to local and regional agencies and utility providers affected by the proposed Project. In addition, property owners directly affected by the Project will also be provided with Notice of Availability of the document.

## 6.1 Federal Agencies

| | | |
|---|---|---|
| US Fish & Wildlife Service<br>2800 Cottage Way<br>Room W-2605<br>Sacramento, CA 95825 | US Fish & Wildlife Service<br>777 E. Tahquitz Canyon Way<br>Suite 208<br>Palm Springs, CA 92262 | US Army Corps of Engineers<br>Los Angeles District<br>P.O. Box 532711<br>Los Angeles, CA 90053-2325 |

## 6.2 State Agencies

| | | |
|---|---|---|
| Office of Planning and Research (OPR)<br>State Clearinghouse<br>1400 Tenth Street<br>Sacramento, CA 95814 | State Clearinghouse<br>Attn: Kate Gordon Director<br>Office of Planning and Research<br>1400 Tenth St.<br>Sacramento, CA 95814 | Native American Heritage Commission<br>Attn: Christina Snider, Ex. Secretary<br>1550 Harbor Blvd, Suite 100<br>West Sacramento, CA 95691 |
| California Department of Conservation<br>Attn: David Bunn, Director<br>801 "K" St., MS 24-01<br>Sacramento, CA 95814 | State Water Resources Control Board<br>Attn: Eileen Sobeck, Executive Director<br>1001 "I" St.<br>Sacramento, CA 95814 | California Public Utilities Commission<br>Attn: Alice Stebbins, Executive Director<br>505 Van Ness Ave.<br>San Francisco, CA 94102 |
| Office of Historic Preservation<br>Julianne Polanco, Pres. Officer<br>1725 23rd St., Ste. 100<br>Sacramento, CA 95816 | California Air Resources Board<br>1001 "I" St.<br>P.O. Box 2815<br>Sacramento, CA 95812 | California Highway Patrol<br>Inland Division (801)<br>847 East Brier Drive<br>San Bernardino, CA 92408-2820 |
| California Energy Commission<br>Attn: Deputy Director<br>Siting, Transmission, and Env. Division<br>1516 Ninth St., MS-39<br>Sacramento, CA 95814 | State of California, Department of Fish & Wildlife, Region 6<br>3602 Inland Empire Boulevard, Suite C-220<br>Ontario, CA 91764 | California Highway Patrol<br>Attn: Officer Joseph Medina<br>1916 J Street<br>Needles, CA 92363 |
| California Resources Agency<br>1416 Ninth St., Ste. 1311<br>Sacramento, CA 95814 | | |

## 6.3 Regional/County/Local Agencies

| | | |
|---|---|---|
| Southern California Association of Governments<br>Riverside County Regional Office<br>3403 10th Street, Suite 805<br>Riverside, CA 92501 | Southern California Association of Governments<br>San Bernardino County Regional Office<br>1170 West 3rd Street, Suite 140<br>San Bernardino, CA 92410 | Water Quality Control Board<br>Santa Ana Region<br>3737 Main Street, #500<br>Riverside, CA 92501 |
| San Bernardino County Sheriff Department<br>26985 East Baseline<br>Highland, CA 92346 | South Coast AQMD<br>IGR Coordinator<br>21865 East Copley Drive<br>Diamond Bar, CA 91765 | City of San Bernardino Community Development Department<br>300 North "D" Street, 3rd Floor<br>San Bernardino, CA 92418 |
| City of San Bernardino Public Works Department<br>300 North "D" Street, 3rd Floor<br>San Bernardino, CA 92418 | City of San Bernardino Police Department<br>710 North D Street<br>San Bernardino, CA 92401 | City of San Bernardino Fire Department<br>200 East 3rd Street<br>San Bernardino, CA 92410 |
| San Bernardino County Land Development Department<br>385 N. Arrowhead Avenue<br>San Bernardino, CA 92415 | San Bernardino County Department of Public Works<br>825 E. Third Street<br>San Bernardino, CA 92415 | San Bernardino County Fire Department<br>157 W. 5th Street, 2nd Floor<br>San Bernardino, CA 92415-0451 |
| San Bernardino County Flood Control District<br>825 E. Third Street<br>San Bernardino, CA 92415 | California State University San Bernardino<br>Facilities Planning, Design & Construction<br>5500 University Parkway<br>San Bernardino, CA 92407 | Mr. Gary McBride<br>Chief Executive Officer County of San Bernardino<br>385 North Arrowhead Avenue, 5th Floor<br>San Bernardino, CA 92415-0120 |
| San Bernardino County Transportation Authority<br>1170 W. 3rd Street, 2nd Floor<br>San Bernardino, CA 92410 | | |

## 6.4 Local Elected Officials

| | | |
|---|---|---|
| John Valdivia, Mayor<br>City of San Bernardino<br>290 North D Street<br>San Bernardino, CA 92401 | Hon. Janice Rutherford<br>Supervisor, District 2<br>San Bernardino County Board of Supervisors<br>385 N. Arrowhead Ave., 5th Floor<br>San Bernardino, CA 92415 | Hon. Robert A. Lovingood<br>Supervisor, District 1<br>San Bernardino County Board of Supervisors<br>385 N. Arrowhead Ave., 5th Floor<br>San Bernardino, CA 92415 |

| | | |
|---|---|---|
| Hon. Dawn Rowe<br>Supervisor, District 3<br>San Bernardino County Board of Supervisors<br>385 N. Arrowhead Ave., 5th Floor<br>San Bernardino, CA 92415 | Hon. Curt Hagman<br>Supervisor, District 4<br>San Bernardino County Board of Supervisors<br>385 N. Arrowhead Ave., 5th Floor<br>San Bernardino, CA 92415 | Hon. Josie Gonzales<br>Supervisor, District 5<br>San Bernardino County Board of Supervisors<br>385 N. Arrowhead Ave., 5th Floor<br>San Bernardino, CA 92415 |
| Theodore Sanchez<br>First Ward<br>San Bernardino City Council<br>290 North D Street, 8th Floor<br>San Bernardino, CA 92401 | Sandra Ibarra<br>Second Ward<br>San Bernardino City Council<br>290 North D Street, 8th Floor<br>San Bernardino, CA 92401 | Juan Figueroa<br>Third Ward<br>San Bernardino City Council<br>290 North D Street, 8th Floor<br>San Bernardino, CA 92401 |
| Fred Shorett<br>Fourth Ward<br>San Bernardino City Council<br>290 North D Street, 8th Floor<br>San Bernardino, CA 92401 | Henry Nickel<br>Fifth Ward<br>San Bernardino City Council<br>290 North D Street, 8th Floor<br>San Bernardino, CA 92401 | Bessine L. Richard<br>Mayor Pro Tem<br>San Bernardino City Council<br>290 North D Street, 8th Floor<br>San Bernardino, CA 92401 |

## 6.5 Interested Groups, Organizations, and Individuals

| | | |
|---|---|---|
| Andrew Salas, Chairperson<br>Gabrieleno Band of Mission Indians – Kizh Nation<br>P.O. Box 393<br>Covina, CA 91723 | Anthony Morales, Chairperson,<br>Gabrieleno/Tongva San Gabriel Band of Mission Indians<br>P.O. Box 693<br>San Gabriel, CA 91778 | Sandonne Goad, Chairperson,<br>Gabrielino/Tongva Nation<br>106 ½ Judge John Aiso Street, #231<br>Los Angeles, CA 90012 |
| Robert Dorame, Chairperson<br>Gabrielino Tongva Indians of California Tribal Council<br>P.O. Box 490<br>Bellflower, CA 90707 | Charles Alvarez<br>Councilman, Gabrielino-Tongva Tribe<br>23454 Vanowen Street<br>West Hills, CA 91307 | Lee Clauss<br>Director of Cultural Resources<br>San Manuel Band of Mission Indians<br>26569 Community Center Drive<br>Highland, CA 92346 |
| Serrano Nation of Mission Indians<br>c/o Mark Cochran<br>P.O. Box 343<br>Patton, CA 92369 | Rosemary Morillo, Chairperson<br>Soboba Band of Luiseno Indians<br>P.O. Box 487<br>San Jacinto, CA 92583 | |

## 6.6 Utilities, Services, Businesses, and Other Property Owners and Occupants within a 500-foot Radius of Project Limits

| | | |
|---|---|---|
| Kim Family Trust<br>2560 W Olympic Boulevard,<br>Ste 204<br>Los Angeles, CA 90006 | City of San Bernardino<br>300 N D Street<br>6th Floor<br>San Bernardino, CA 92418 | Hillwood LIT II LP<br>13600 Heritage Parkway<br>STE 200<br>Fort Worth, TX 76177 |
| Sidney J Thompson<br>4304 Melborne<br>San Bernardino, CA 92407 | Camden Holdings, LLC<br>1000 Lowes Boulevard<br>Mooresville, NC 28117 | Eleanore Eichelmann<br>P.O. Box 399<br>Lakeport, CA 95453 |
| Stacy Martin<br>13181 Crossroads Parkway N.,<br>#300<br>City of Industry, CA 91746 | Bubba Likes Tortillas, LLC<br>15332 Antioch Street<br>#144<br>Pacific Palisades, CA 90272 | Zyra Hospitality, LLC<br>411 Huntington Drive,<br>#107-264<br>Arcadia, CA 91006 |
| Great American Properties, LLC<br>201 Wilshire Boulevard<br>2nd Floor<br>Santa Monica, CA 90401 | 820 Thompson Development Company<br>P.O. Box 1476<br>Tacoma, WA 98402 | Wakimoto Family 2004, LP<br>1855 Hamilton Avenues<br>Ste #200<br>San Jose, CA 95125-5672 |
| Clinton A. Townsend<br>4334 Lakewood Drive<br>San Bernardino, CA 92407 | Baltasar Molina III<br>4404 Lakewood Drive<br>San Bernardino, CA 92407 | Roger H. Wang<br>P.O. Box 16321<br>Beverly Hills, CA 90209-2321 |
| Gurprashad, LLC<br>5404 Amber Circle<br>Calabasas, CA 91302 | G & M GAPCO LLC<br>16868 A Street<br>Huntington Beach, CA 92647 | Hong Family Trust<br>3660 Wilshire Boulevard,<br>#1125<br>Los Angeles, CA 90010 |
| Huntington Beach Partnership<br>P.O. Box 1290<br>Agoura Hills, CA 91301 | Michael E. Anderson<br>4304 Lakewood Drive<br>San Bernardino, CA 92407 | Frank & Marcia Campbell<br>4305 N Melborne<br>San Bernardino, CA 92407 |
| Global Pacific University Parkway, LL<br>P.O. Box 4638<br>Diamond Bar, CA 91765 | Ridgeline Investors, LLC<br>9454 Wilshire Boulevard<br>#700<br>Beverly Hills, CA 90212 | UTCSB LLC<br>1925 Century Park East<br>#600<br>Los Angeles, CA 90067 |
| Alisa Joyce Haffner Living Trust<br>9201 Gibson Lane<br>Potter Valley, CA 95469 | Patrisia Gurrola<br>1671 Morgan Road<br>San Bernardino, CA 92407 | Hugo Gutierrez<br>4364 Melborne Road<br>San Bernardino, CA 92407 |
| San Bernardino Scottish Rte Bldg Assn In<br>4400 N Varsity Avenue<br>San Bernardino, CA 92407 | Southern California Edison Company<br>P.O. Box 800<br>Rosemead, CA 91770 | Wal-Mart Real Estate Business Trust<br>P.O. Box 8050 MS 0555<br>Bentonville, AR 72712 |
| Coyne Qualified Elecion Tr<br>229 King Daniel Lane<br>Goleta, CA 93117 | Michael P. McNamara<br>4394 Lakewood Drive<br>San Bernardino, CA 92407 | Tristen M. Mejia<br>4364 Lakewood Drive<br>San Bernardino, CA 92407 |
| Cubesmart, LP<br>P.O. Box 320099<br>Alexandria, VA 22304 | Salvador Duarte<br>4395 Melborne Road<br>San Bernardino, CA 92407 | Sabbath Day Ranch, LLC<br>44058 De Luz Road<br>Temecula, CA 92590 |
| F & M Bains, Inc.<br>3890 University Parkway<br>San Bernardino, CA 92407 | Timothy Pytell<br>1683 Grossmont Road<br>San Bernardino, CA 92407 | Ernest Andrew Gamboa<br>4365 Melborne Road<br>San Bernardino, CA 92407 |

| | | |
|---|---|---|
| G6 Hospitality Property, LLC<br>P.O. Box 117508<br>Carrollton, TX 75007 | Junghwan Choi<br>3 Walnut Creek<br>Irvine, CA 92602 | Patricia Garcia<br>1673 Grossmont Road<br>San Bernardino, CA 92407 |
| Jimmi Fikri Kaymaz<br>1567 Brookside Avenue<br>Redlands, CA 92373 | Juan P Hernandez<br>4434 N Lakewood Drive<br>San Bernardino, CA 92407 | Mary K. Eatmon<br>4335 Melborne Road<br>San Bernardino, CA 92407 |
| St. James Management, Inc.<br>231 S Roxbury Drive<br>Beverly Hills, CA 90212 | Steve Matta<br>4264 N Lakewood Drive<br>San Bernardino, CA 92407 | Boilermakers Local 92<br>Training Fund<br>2260 Riverside Drive<br>Bloomington, CA 92316 |
| Castlepark Apartments, LLC<br>9757 NE Junaita Drive<br>Ste 300<br>Kirkland, WA 98034 | SB-UNI LLC<br>3146 Redhill Avenue<br>Ste #200A<br>Costa Mesa, CA 92626 | Chino Hills Oil, Inc.<br>29501 Canwood Street<br>Ste #200<br>Agoura Hills, CA 91301 |
| Maria Lopez<br>1695 Grossmont Road<br>San Bernardino, CA 92407 | Ricardo Bueno<br>10142 Appleton Street<br>Victorville, CA 92392 | Inland Pacific Petroleum, Inc.<br>3909 Hallmark Parkway<br>San Bernardino, CA 92407 |
| John C. McCreight<br>4394 Melborne Road<br>San Bernardino, CA 92407 | Richard G. Brodowski<br>1649 Grossmont Drive<br>San Bernardino, CA 92407 | Hallmark 43, LLC<br>1118 Wellington Avenue<br>Pasadena, CA 91103 |
| Hughes Markets, Inc.<br>P.O. Box 54143<br>Los Angeles, CA | Michael A. Caldwell<br>1661 W Grossmont Road<br>San Bernardino, CA 92407 | Jose E. Gonzalez<br>4514 Morgan Court<br>San Bernardino, CA 92407 |
| University Village Shopping Center<br>9454 Wilshire Boulevard, #650<br>Beverly Hills, CA 90212 | Steve & Peggy's Properties Cal, LLC<br>25201 Paseo De Alicia, #104<br>Laguna Hills, CA 92563 | Boxer Finance, LLC<br>720 N Post Oak, #500<br>Houston, TX 77024 |
| Lakeyche W. Locke<br>4504 Morgan Court<br>San Bernardino, CA 92407 | DE-ICE LLC<br>P.O. Box 9010<br>San Bernardino, CA 92427 | Robert C. Heflin<br>1678 W Morgan Road<br>San Bernardino, CA 92407 |
| OBA Court Limited<br>1330 Heulu Street. #902<br>Honolulu, HI 96822 | Lake Place Homes, LLC<br>13405 Inglewood Ave, #5<br>Hawthorne, CA 90250 | Patrick A. Rogers<br>4464 N Lakewood Drive<br>San Bernardino, CA 92407 |
| Residuary Trust<br>300 S Grand Avenue, 6th floor<br>Los Angeles, CA 90071 | Barbara J Simonds<br>1679 W Morgan Road<br>San Bernardino, CA 92407 | San Bernardino County Flood Control District<br>825 E Third Street<br>San Bernardino, CA 92415 |

| | | |
|---|---|---|
| Business Owner<br>1960 Ostrems Way<br>San Bernardino, CA 92407 | Business Owner<br>1985 Ostrems Way<br>San Bernardino, CA 92407 | Business Owner<br>1990 Ostrems Way<br>San Bernardino, CA 92407 |
| Business Owner<br>2000 Ostrems Way<br>San Bernardino, CA 92407 | Business Owner<br>3890 Hallmark Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4001 Hallmark Pkwy<br>San Bernardino, CA 92407 |
| Business Owner<br>4012 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4016 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>020 University Pkwy<br>San Bernardino, CA 92407 |
| Business Owner<br>4023 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4041 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4059 University Pkwy<br>San Bernardino, CA 92407 |
| Business Owner<br>4077 University Pkwy Ste 101<br>San Bernardino, CA 92407 | Business Owner<br>4077 University Pkwy Ste 102<br>San Bernardino, CA 92407 | Business Owner<br>4077 University Pkwy Ste 103<br>San Bernardino, CA 92407 |
| Business Owner<br>4077 University Pkwy Ste 104<br>San Bernardino, CA 92407 | Business Owner<br>4077 University Pkwy Ste 105<br>San Bernardino, CA 92407 | Business Owner<br>4095 University Pkwy<br>San Bernardino, CA 92407 |
| Business Owner<br>4375 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4394 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4394 University Pkwy Ste A<br>San Bernardino, CA 92407 |
| Business Owner<br>4400 N Varsity Ave<br>San Bernardino, CA 92407 | Business Owner<br>4404 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4414 University Pkwy Ste B<br>San Bernardino, CA 92407 |
| Business Owner<br>4414 University Pkwy Ste C<br>San Bernardino, CA 92407 | Business Owner<br>4414 University Pkwy Ste D<br>San Bernardino, CA 92407 | Business Owner<br>4414 University Pkwy Ste E<br>San Bernardino, CA 92407 |
| Business Owner<br>4414 University Pkwy Ste F<br>San Bernardino, CA 92407 | Business Owner<br>4424 University Pkwy<br>San Bernardino, CA 92407 | Business Owner<br>4434 University Pkwy Ste A<br>San Bernardino, CA 92407 |
| Business Owner<br>4434 University Pkwy Ste C<br>San Bernardino, CA 92407 | Business Owner<br>4434 University Pkwy Ste D<br>San Bernardino, CA 92407 | Business Owner<br>4434 University Pkwy Ste E<br>San Bernardino, CA 92407 |
| Business Owner<br>4434 University Pkwy Ste G<br>San Bernardino, CA 92407 | Business Owner<br>4434 University Pkwy Ste H<br>San Bernardino, CA 92407 | Business Owner<br>4434 University Pkwy Ste I<br>San Bernardino, CA 92407 |
| Business Owner<br>4434 University Pkwy Ste J<br>San Bernardino, CA 92407 | Business Owner<br>4444 University Pkwy<br>San Bernardino, CA 92407 | Current Occupant<br>1649 Grossmont Rd<br>San Bernardino, CA 92407 |

| | | |
|---|---|---|
| Current Occupant<br>1661 Grossmont Rd<br>San Bernardino, CA 92407 | Current Occupant<br>1670 Morgan Rd<br>San Bernardino, CA 92407 | Current Occupant<br>1678 Morgan Rd<br>San Bernardino, CA 92407 |
| Current Occupant<br>1679 Morgan Rd<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 101<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 102<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 103<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 104<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 105<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 106<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 107<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 108<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 109<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 110<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 111<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 112<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 113<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 114<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 115<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 116<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 117<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 118<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 119<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 121<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 122<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 123<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 124<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 125<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 126<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 127<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 128<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 129<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 130<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 131<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 132<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 133<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 134<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 135<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 136<br>San Bernardino, CA 92407 |

| | | |
|---|---|---|
| Current Occupant<br>1925 W College Ave Apt 137<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 138<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 139<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 140<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 141<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 142<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 143<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 144<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 145<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 146<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 147<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 148<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 149<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 150<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 151<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 152<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 153<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 154<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 155<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 156<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 157<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 158<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 159<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 160<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 161<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 162<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 163<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 164<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 165<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 166<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 167<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 168<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 169<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 170<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 171<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 172<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 173<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 174<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 175<br>San Bernardino, CA 92407 |

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| Current Occupant<br>1925 W College Ave Apt 176<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 177<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 178<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 179<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 180<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 181<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 182<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 183<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 184<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 185<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 186<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 187<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 188<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 189<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 190<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 191<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 192<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 193<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 194<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 195<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 196<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 197<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 198<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 199<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 200<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 201<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 202<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 203<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 204<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 205<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 206<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 207<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 208<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 209<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 210<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 211<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 212<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 213<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 214<br>San Bernardino, CA 92407 |

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| Current Occupant<br>1925 W College Ave Apt 215<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 216<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 217<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 218<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 219<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 220<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 221<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 222<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 223<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 224<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 225<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 226<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 227<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 228<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 229<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 230<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 231<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 232<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 233<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 234<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 235<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 236<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 237<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 238<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 239<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 240<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 241<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 242<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 243<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 244<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 245<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 246<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 247<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 248<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 249<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 250<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 251<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 252<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 253<br>San Bernardino, CA 92407 |

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| Current Occupant<br>1925 W College Ave Apt 254<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 255<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 256<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 257<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 258<br>San Bernardino, CA 92407 | Current Occupant<br>1925 W College Ave Apt 259<br>San Bernardino, CA 92407 |
| Current Occupant<br>1925 W College Ave Apt 260<br>San Bernardino, CA 92407 | Current Occupant<br>4234 Lakewood Dr<br>San Bernardino, CA 92407 | Current Occupant<br>4235 Lakewood Dr<br>San Bernardino, CA 92407 |
| Current Occupant<br>4264 Lakewood Dr<br>San Bernardino, CA 92407 | Current Occupant<br>4265 Lakewood Dr<br>San Bernardino, CA 92407 | Current Occupant<br>4304 Melborne Rd<br>San Bernardino, CA 92407 |
| Current Occupant<br>4305 Melborne Rd<br>San Bernardino, CA 92407 | Current Occupant<br>4334 Melborne Rd<br>San Bernardino, CA 92407 | Current Occupant<br>4364 Melborne Rd<br>San Bernardino, CA 92407 |
| Current Occupant<br>4365 Melborne Rd<br>San Bernardino, CA 92407 | Current Occupant<br>4394 Melborne Rd<br>San Bernardino, CA 92407 | Current Occupant<br>4405 Melborne Rd<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1001<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1002<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1003<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1004<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1005<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1006<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1007<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1008<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1009<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1010<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1011<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1012<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1013<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1014<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1015<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1016<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1017<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1018<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1019<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1020<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1021<br>San Bernardino, CA 92407 |

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| Current Occupant<br>4420 N Varsity Ave Apt 1022<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1023<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1024<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1025<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1026<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1027<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1028<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1029<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1030<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1031<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1032<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1033<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1034<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1035<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1036<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1037<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1038<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1039<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1040<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1041<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1042<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1043<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1044<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1045<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1046<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1047<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1048<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1049<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1050<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1051<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1052<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1053<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1054<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1055<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1056<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1057<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1058<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1059<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1060<br>San Bernardino, CA 92407 |

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| Current Occupant<br>4420 N Varsity Ave Apt 1061<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1062<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1063<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1064<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1065<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1066<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1067<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1068<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1069<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1070<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1071<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1072<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1073<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1074<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1075<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1076<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1077<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1078<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1079<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1080<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1081<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1082<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1083<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1084<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1085<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1086<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1087<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1088<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1089<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1090<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1091<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1092<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1093<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1094<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1095<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1096<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1097<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1098<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1099<br>San Bernardino, CA 92407 |

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| Current Occupant<br>4420 N Varsity Ave Apt 1100<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1101<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1102<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1103<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1104<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1105<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1106<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1107<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1108<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1109<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1110<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1111<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1112<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1113<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1114<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1115<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1116<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1117<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1118<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1119<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1120<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1121<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1122<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1123<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1124<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1125<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1126<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1127<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1128<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1129<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1130<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1131<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1132<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1133<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1134<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1135<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1136<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1137<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1138<br>San Bernardino, CA 92407 |

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| Current Occupant<br>4420 N Varsity Ave Apt 1139<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1140<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1141<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1142<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1143<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1144<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1145<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1146<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1147<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1148<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1149<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1150<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1151<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1152<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1153<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1154<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1155<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1156<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1157<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1158<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1159<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1160<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1161<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1162<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1163<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1164<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1165<br>San Bernardino, CA 92407 |
| Current Occupant<br>4420 N Varsity Ave Apt 1166<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1167<br>San Bernardino, CA 92407 | Current Occupant<br>4420 N Varsity Ave Apt 1168<br>San Bernardino, CA 92407 |
| Current Occupant<br>4434 Lakewood Dr<br>San Bernardino, CA 92407 | Current Occupant<br>4464 Lakewood Dr<br>San Bernardino, CA 92407 | Current Occupant<br>4494 Lakewood Dr<br>San Bernardino, CA 92407 |
| Current Occupant<br>4505 Morgan Ct<br>San Bernardino, CA 92407 | | |

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# CHAPTER 7 REFERENCES

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# APPENDIX A – TITLE VI POLICY

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

**DEPARTMENT OF TRANSPORTATION**
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

*Making Conservation a California Way of Life.*

April 2018

## NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email Title.VI@dot.ca.gov, or visit the website www.dot.ca.gov.

LAURIE BERMAN
Director

*"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"*

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# APPENDIX B – ENVIRONMENTAL COMMITMENTS RECORD (ECR)

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# ENVIRONMENTAL COMMITMENTS RECORD
## I-215/University Parkway Improvement Project

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **AESTHETICS** | | | | | | | | | | |
| **VIS-1** **Lighting Plan.** Lighting fixtures will be selected and installed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with non-glare hoods and focused within the Project ROW. The lighting plan will be reviewed and approved by the City of San Bernardino's Resident Engineer and Caltrans District 8 Landscape Architect prior to construction to ensure compliance with these criteria. | 2-19 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer, City of San Bernardino Resident Engineer, Caltrans District 8 Landscape Architect | During Final Design | | | | | | |
| **VIS-2** **Landscape Plan.** A highway landscape plan will be prepared that identifies all opportunities to use areas within the state ROW for full landscaping consistent with the Caltrans Highway Design Manual. This will include landscaping for graded areas with plant species consistent with adjacent vegetation and enhancement of new project structures, such as ramps and tunnels to the extent feasible. This plan will incorporate all applicable procedures and requirements detailed in the Caltrans Highway Design Manual, Section 902.1, Planting Guidelines (November 2001), and policies of the City of San Bernardino's General Plan and Municipal Code, as applicable.<br><br>During Final Design, the Caltrans District 8 Landscape Architect will verify that the design minimizes removal of existing mature trees. If removal of mature trees cannot be avoided, additional landscape improvements will be incorporated into the Final Design for these areas. The replacement ratio of any trees removed will be determined by the Caltrans District 8 Landscape Architect. | 2-19 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Caltrans District 8 Landscape Architect | During Final Design | | | | | | |
| **VIS-3** **San Bernardino General Plan Urban Design Element.** During Final Design, the City of San Bernardino's Resident Engineer will verify that design elements are consistent with the vision for the City regarding aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage. | 2-19 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and City of San Bernardino Resident Engineer | During Final Design | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **VIS-4** **University District Specific Plan.** During Final Design, the City of San Bernardino's Resident Engineer will verify that design elements are consistent with the vision for the University District Specific Plan regarding gateways, aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage. | 2-19 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and City of San Bernardino Resident Engineer | During Plans, Specifications and Estimate | | | | | | |
| **VIS-5** **Conceptual Plan.** During Final Design, a conceptual plan will be utilized and coordinated among the City of San Bernardino, SBCTA, and Caltrans District Landscape Architect to ensure consistency with the I-215 San Bernardino Master Plan guidelines, San Bernardino General Plan Urban Design Element, and the University District Specific Plan. | 2-20 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer, City of San Bernardino Resident Engineer, Caltrans District 8 District Landscape Architect | During Final Design | | | | | | |
| **AIR QUALITY** | | | | | | | | | | |
| **AQ-1** **South Coast Air Quality Management District Rule 403.** During clearing, grading, earthmoving, and excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in SCAQMD Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in the Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible. | 2-26 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | |
| **AQ-2** **Ozone Precursor Emissions Control.** Project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.. | 2-26 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **AQ-3** **State Vehicle Code Requirements.** During construction, all trucks that are used to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads. | 2-26 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **AQ-4** **Caltrans Standard Specifications for Construction Section 14-9-02.** During construction, the contractor will adhere to the Caltrans Standard Specifications for Construction (Section 14.9). Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | SSP | | | | | |
| **AQ-5** **Fugitive Dust Emissions - Dust.** Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **AQ-6** **Soil Binding Elements.** Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **AQ-7** **Fugitive Dust Emissions – Truck Washing.** Trucks will be washed as they leave the ROW, as necessary to control fugitive dust emissions. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **AQ-8** **California Code of Regulations Title 17, Section 93114.** Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CCR Title 17, Section 93114. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **AQ-9** **Dust Control Plan.** A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to and during Construction | | | | | | |
| **AQ-10** **Equipment and Storage Site Requirements.** Equipment and material storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly. | 2-27 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **BIOLOGICAL RESOURCES** | | | | | | | | | | |
| **BIO-1** **Nesting Birds.** To avoid impacts to nesting birds, any native vegetation removal or tree (native or exotic) trimming activities will occur outside of the nesting bird season. In the event that vegetation clearing is necessary during the nesting season (i.e., February 15–August 31), a contractor supplied, qualified biologist will conduct a pre-construction survey to identify the locations of nests. Should nesting birds be found, an exclusionary buffer will be established by the biologist. This buffer should be clearly marked in the field by construction personnel under guidance of the biologist, and construction or clearing will not be conducted within this zone until the biologist determines that the young have fledged or the nest is no longer active. | 2-33 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Biologist | Prior to Construction | | | | | | |
| **BIO-2** **Environmental Sensitive Areas.** Non-impacted CBS and CBS (Disturbed) habitat that is outside the Project limits will be identified as an ESA. Prior to construction, exclusionary fencing will be installed around all ESAs, under supervision of a biologist familiar with the biological resources in the BSA, to prevent accidental encroachment into these areas. | 2-33 | IS with Proposed ND | Caltrans and San Bernardino County Transportation Authority Designated Archaeologist | During Construction | | | | | | |
| **BIO-3** **Weed Abatement.** A weed abatement program will be developed and implemented by SBCTA in order to minimize the importation of non-native plant material during and after construction. Eradication strategies will be employed should an invasion occur | 2-33 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |
| **BIO-4** **Fire Season.** When work is conducted during the fire season (as identified by the San Bernardino County Fire Authority) adjacent to any vegetation, appropriate firefighting equipment (e.g., extinguishers, shovels, and water tankers) will be available on site during all phases of Project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise the construction contractors regarding fire risk from all construction-related activities. | 2-33 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Biologist | Prior to and During Construction | | | | | | |
| **BIO–5** **California Gnatcatcher Breeding Season.** Should construction be initiated during the coastal CAGN breeding season (February 15–August 31), 3 separate days of preconstruction nesting surveys will be conducted within 7 days of construction. Should breeding CAGN be identified within 500 feet of the Project, Project activities will not be allowed within 500 feet of the active nest, and additional noise measures will be implemented, as needed, to maintain noise levels of less than 60 dBA Leq at the nest location. Section 7 | 2-33 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Biologist | Prior to Construction | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| consultation will be initiated with the USFWS prior to conducting project activities within 500 feet of the active nest. | | | | | | | | | | |
| **BIO–6** **Burrowing Owl Preconstruction Survey.** A preconstruction survey for BUOW will be conducted by a contractor supplied, qualified biologist within 30-days prior to vegetation clearing/grading. If BUOW are found within 200 meters of Project limits during the preconstruction survey, the biologist will determine appropriate measures necessary to ensure there is no take of active BUOW nests and CDFW conservation requirements with regards to BUOW are met. | 2-34 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Biologist | Prior to Construction | | | | | | |
| **BIO-7** **Burrowing Owl Preconstruction Survey Guidelines.** A qualified bat biologist familiar with crevice dwelling bat and bird species will survey I-215 over University Parkway Bridge in June, prior to construction, to assess the potential for the bridge's use for bat roosting, bat maternity roosting, and bird roosting/nesting because maternity roosts and nests are generally formed in the spring. The qualified bat biologist will also perform preconstruction surveys within 2 weeks prior to construction because bat and bird roosts can change seasonally. These surveys will include a combination of structure inspections, exit counts, and acoustic surveys. | 2-34 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Bat Biologist | Prior to Construction | | | | | | |
| **BIO-8** **Bat Management Plan.** If a roost is detected, a bat management plan will be prepared if it is determined that Project activities would result in impacts to roosting bats. The bat management plan will be submitted for CDFW approval prior to implementation and will include appropriate avoidance and minimization efforts such as:<br><br>**Daytime Work Hours.** All work conducted under the I-215 bridge will occur during the day. If this is not feasible, lighting and noise will be directed away from night roosting and foraging areas.<br><br>**Reduced use of Combustion Equipment.** Construction personnel will avoid parking construction-related combustion equipment (such as generators, pumps, and vehicles) under the I-215 bridge to the fullest extent possible. Construction activities will avoid severely restricting airspace access to the roosts.<br><br>**Temporary Exclusion.** If recommended by the qualified bat biologist, to avoid indirect disturbance of bats and birds while roosting in areas that would be adjacent to construction activities, any portion of the structure that is deemed by a qualified bat biologist to have potential bat or bird roosting habitat and may be affected by the proposed Project will have temporary bat and bird eviction and exclusion devices installed under the supervision of a qualified and permitted bat biologist prior to the initiation of construction activities. | 2-34 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Biologist | Prior to and During Construction | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed Date / Initials | Construction Task Completed Date / Initials | Environmental Compliance YES | Environmental Compliance NO |
|---|---|---|---|---|---|---|---|---|---|---|
| Eviction and subsequent exclusion will be conducted during the fall (September or October) to avoid trapping flightless young bats inside during the summer months or hibernating/overwintering individuals during the winter. Such exclusion efforts are dependent on weather conditions, take a minimum of 2 weeks to implement, and must be continued to keep the structures free of bats and birds until the completion of construction. All eviction and/or exclusion techniques will be coordinated between the qualified bat biologist and the appropriate resource agencies (e.g., CDFW) if the structure is occupied by bats. | | | | | | | | | | |
| **BIO-9** **Nest Removal.** In order to avoid impacts to bridge- and crevice-nesting birds (i.e., swifts and swallows), all work on existing bridges with potential habitat that is conducted between February 15 and August 31 will include the removal of all bird nests prior to February 1 of that year to construction under the guidance and observation of a contractor supplied, qualified biologist. Removal of swallow nests that are under construction will be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by a contractor supplied, qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or the completion of construction. All nest exclusion techniques will be coordinated between the Caltrans District Biologist, CDFW, and USFWS, if applicable. | 2-35 | IS with Proposed ND | Caltrans District 8 Biologist and Designated Qualified Biologist | Prior to Construction | | | | | | |
| **CULTURAL RESOURCES** | | | | | | | | | | |
| **CUL-1** **Discovery of Buried Cultural Resources.** If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work will stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find. | 2-40 | IS with Proposed ND | Caltrans and San Bernardino County Transportation Authority Designated Archaeologist | Final Design, Construction | SSP or NSSP | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **CUL-2** **Discovery of Human Remains.** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC who will then notify the MLD. At this time, the person who discovered the remains will contact the Caltrans and/or SBCTA so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. | 2-40 | IS with Proposed ND | Caltrans and San Bernardino County Transportation Authority | During Construction | | | | | | |
| **GEOLOGY AND SOILS** | | | | | | | | | | |
| **PAL-1** **Environmental Awareness Training.** Prior to the start of construction, SBCTA will ensure all field personnel be briefed regarding the types of fossils that could be found in the Project limits and the procedures to follow should paleontological resources be encountered. This training should be accomplished at the pre-grade kick-off meeting or morning tailboard meeting and should be conducted by the Project paleontologist or his/her representative. Specifically, the training should provide a description of the fossil resources that may be encountered in the Project limits, outline steps to follow in the event that a fossil discovery is made, and provide contact information for the Project paleontologist and on-site monitor(s). The training should be developed by the Project paleontologist and may be conducted concurrent with other environmental training (e.g., cultural and natural resources awareness training, safety training, etc.). | 2-46 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor, Designated and Qualified Project Paleontologist | Prior to Construction | | | | | | |
| **PAL-2** **Paleontological Mitigation Monitoring.** Prior to the commencement of ground-disturbing activities, SBCTA will ensure that a qualified professional paleontologist be retained to prepare and implement a paleontological monitoring plan for the Project. Part-time monitoring is recommended for grading and excavation activities at depths greater than 5 feet bgs that will disturb previously undisturbed Quaternary Alluvium (Qya). Due to soil development, previous anthropogenic developments, and young age of surficial soil and native Quaternary surficial sediments, monitoring should not be required in Project limits where construction activities disturb sediments at depths less than 5 feet bgs. Monitoring should entail the visual inspection of excavated or graded areas and trench sidewalls.<br>• In the event that an inadvertent fossil discovery is encountered during construction, all work will cease within a 20-foot radius of the discovery. On-site personnel will contact the construction superintendent and the Caltrans PRS immediately. | 2-46 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer Qualified Paleontologist and Caltrans Paleontological Resource Specialist | Prior to and During Construction | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| • In the event that an inadvertent fossil discovery is encountered during construction, SBCTA will ensure that the Caltrans PRS will examine the discovery to assess it for scientific significance and determine if any paleontological resources mitigation is warranted, including monitoring, preservation in place, excavation, documentation, curation, or other appropriate measures.<br><br>• In the event that an inadvertent fossil discovery is encountered during construction, and if the Caltrans PRS determines the find is scientifically significant and mitigation is warranted, SBCTA will ensure that a qualified professional paleontologist be retained. Steps will be taken to protect against looting, erosion, or other human or natural damage while the fossil locality is exposed. | | | | | | | | | | |
| **PAL-3** **Fossil Preparation, Curation, and Reporting.** Upon completion of fieldwork, all significant fossils collected should be prepared in a properly equipped paleontology laboratory to a point ready for curation. Preparation will include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Following laboratory work, all fossils specimens should be identified to the lowest taxonomic level, cataloged, analyzed, and delivered to the Natural History Museum of Los Angeles County for permanent curation and storage. The cost of curation is assessed by the repository and is the responsibility of SBCTA.<br><br>At the conclusion of laboratory work and museum curation, a final paleontological mitigation report should be prepared describing the results of the paleontological mitigation monitoring efforts associated with the Project. The report should include a summary of the field and laboratory methods, an overview of the Project limits geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, a copy of the report should also be submitted to the Natural History Museum of Los Angeles County. | 2-47 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer, Designated Contractor, and Qualified Project Paleontologist | Post Construction | | | | | | |
| **Greenhouse Gas Emissions** | | | | | | | | | | |
| **GHG-1** **Truck Idling.** During construction, SBCTA will ensure that idling will be limited to 5 minutes for delivery and dump trucks and other diesel-powered equipment. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-2** **Truck Trips.** During construction, SBCTA will ensure that truck trips are scheduled outside of peak morning and evening commute hours. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority | During Construction | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| | | | Resident Engineer and Designated Contractor | | | | | | | |
| **GHG-3** **Recycled Materials.** During construction, SBCTA will ensure that construction waste is minimized and the use of recycled materials maximized; which reduces consumption of raw materials, reduces landfill waste, and encourages cost savings. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-4** **Potable Water.** During construction, SBCTA will ensure that measures to reduce consumption of potable water will be incorporated. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-5** **On-Site Recycled Materials.** During construction, SBCTA will ensure that on-site recycling of existing project features is encouraged, such as Metal Beam Guard Railing, light standards, sub-base granular material, or native material that meets Caltrans specifications for incorporation into new work. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-6** **Limit Transport of Earthen Materials.** During construction, SBCTA will ensure that earthwork balance be implemented in order to reduce the need for transport of earthen materials by balancing cut and fill quantities. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-7** **Reduce Electric Lighting.** During construction, SBCTA will ensure that the need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights is reduced. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-8** **Improve Energy Efficiency.** SBCTA will ensure that measures are incorporated to improve energy efficiency will be implemented as part of the Project. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-9** **Improve Water Efficiency.** SBCTA will ensure that measures to improve water efficiency (including but not limited to landscaping and building operations) will be implemented as part of the Project. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-10** **Complete Streets.** SBCTA will ensure that Complete Streets components are implemented as part of the Project. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority | During Construction | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| | | | Resident Engineer and Designated Contractor | | | | | | | |
| **GHG-11** **Solar Powered Highway Facility Components.** SBCTA will ensure that installation of solar to supply power to highway facility components or buildings will be implemented as part of the Project. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-12** **Native Landscaping.** SBCTA will ensure that native plants and vegetation (replacing more vegetation than was removed) will be integrated into the project design to increase carbon sequestration. | 2-49 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-13** **Green Infrastructure.** SBCTA will ensure that green infrastructure (planted areas) instead of gray (concrete) storm water facilities, will be implemented as part of the Project. | 2-50 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **GHG-14** **Increased Life-Span Pavement Materials.** SBCTA will ensure the design and installation of long-life pavement structures to minimize life-cycle costs. Consider future climate conditions in decisions. For example, areas that are expected to experience increased temperatures and extreme heat days may have different pavement needs than areas expecting more frequent freezing temperatures. | 2-50 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **HAZARDOUS WASTE / MATERIALS** | | | | | | | | | | |
| **HAZ-1** **Caltrans Standard Specifications, Section 14 11.12.** During construction, SBCTA will ensure that sampling, analysis, removal, and disposal of any traffic striping and pavement materials will be done in accordance with Construction Program Procedure Bulletin 99-2 and the Caltrans Standard Specifications, Section 14-11.12 Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue and Section 36-4 Residue Containing Lead from Paint and Thermoplastic (2015), and be consistent with the requirements within Caltrans Construction Manual, Chapter 7-107E Removing Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue (2017). Before disposal, the contractor is required to sample the removed material for proper waste classification. Yellow traffic stripe and pavement marking that is characterized as hazardous waste require disposal to a DTSC permitted Class I disposal facility. | 2-55 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **HAZ-2** **Construction Health and Safety Plan.** Prior to construction, SBCTA will ensure that a health and safety plan to guide all construction activities is developed. A certified industrial hygienist will prepare this plan based on evaluations of proposed construction activities, the potential hazards identified in this report, and any future assessment prepared for the Project. This plan would contain specific procedures for encountering expected and unexpected contaminants. It would prescribe safe work practices, contaminant monitoring, personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties. The plan would meet the requirements of 29 CFR 1910 and 1926 and all other applicable federal, state, and local regulations and requirements. The designated contractor would be responsible for preparing the health and safety plan before start of construction. | 2-55 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |
| **HAZ-3** **Construction Contaminant Management Plan.** Prior to construction, SBCTA will ensure that a soils and groundwater contaminant management plan is developed. This plan will include procedures for contaminant monitoring and identification, temporary storage, handling, treatment, and disposal of waste and materials in accordance with applicable federal, state, and local regulations and requirements. The designated contractor would be responsible for preparing the contaminant management plan before start of construction. | 2-56 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |
| **HAZ-4** **Construction Contingency Plan.** Prior to construction, SBCTA will ensure that a Construction Contingency Plan with guidance provided in Chapter 7-107 of the Caltrans Construction Manual for handling and dealing with unknown hazards will be developed (Appendix I for Caltrans Unknown Hazards Procedure). This plan will include provisions for responding to events such as | 2-56 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| the discovery of unidentified UST, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes during construction. This plan would address UST decommissioning, field screening, and material testing methods; mitigation and contaminant management requirements; and health and safety requirements for construction workers. If an unexpected release of hazardous substances is found in reportable quantities, the National Response Center must be notified by calling 1-800-424-8802, and cleanup must be coordinated with environmental agencies. The designated contractor is responsible for preparing the construction contingency plan before start of construction. | | | | | | | | | | |
| **HAZ-5** **Lead Compliance Plan.** Prior to construction, SBCTA will ensure that a lead compliance plan is developed by a Certified Industrial Hygienist to protect workers from exposure to lead associated with yellow traffic stripe, pavement makings, and soil. The lead compliance plan will include procedures in the handling, management, sampling, and disposal of material containing yellow traffic stripe, pavement markings, and soil. | 2-56 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |
| **HAZ-6** **National Pollution Discharge Elimination System Construction General Permit.** The NPDES Construction General Permit requires a construction site characterization, including a description of any pollution sources. Prior to construction, SBCTA will ensure that the designated contractor comply with the NPDES Construction General Permit by preparing and implementing a SWPPP to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, storm drain inlet protection, construction materials management, non-storm water BMPs, and provide pollution-source corrective measures. All work must conform to the construction site best management practice requirements specified in the latest edition of the *Storm Water Quality Handbooks: Construction Site Best Management Practices Manual* to control and minimize impacts of construction and construction related activities, materials, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs. | 2-56 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |
| **HAZ-7** **Disposal of Material in Landfills.** Prior to the start of construction, SBCTA will ensure that the designated contractor will be responsible for obtaining advanced approval from landfills to accept any impacted soil that will require disposal at an off-site landfill. | 2-57 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |

| Avoidance, Minimization, and/or Mitigation Measures | Page # in Env. Doc. Or Permit | Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline) | Responsible for Development and/or Implementation of Measure | Timing/ Phase | If applicable, corresponding construction provision: (standard, special, non-standard) | Action(s) Taken to Implement Measure/if checked No, add Explanation here | PS&E Task Completed | Construction Task Completed | Environmental Compliance | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **HYDROLOGY AND WATER QUALITY** | | | | | | | | | | |
| **WQ-1** **National Pollutant Discharge Elimination System Compliance.** SBCTA will ensure that its designated contractor comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002), as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006- DWQ. | 2-62 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Construction | | | | | | |
| **WQ-2:** **Design Pollution Best Management Practices.** SBCTA will ensure that design pollution prevention BMPs are implemented, such as preservation of existing vegetation and slope/surface protection systems (permanent soil stabilization), as well as concentrated flow conveyance systems, such as concrete ditches, oversize drains, inlets, down drains, and storm drain pipes. | 2-63 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to Construction | | | | | | |
| **WQ-3:** **Best Management Practice Implementation.** SBCTA will ensure that the Caltrans-approved treatment BMP are implemented in accordance with the SWMP and consistent with the requirements of the NPDES Statewide Storm Water Permit Waste Discharge Requirements for Caltrans (Order No. 2012-0011-DWQ, NPDES No. CAS00003, adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (effective April 7, 2015). Treatment BMPs may include bio-swales and bio-strips. | 2-63 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | Prior to and During Construction | | | | | | |
| **NOISE** | | | | | | | | | | |
| **N-1** **Use of Mufflers for Construction Equipment.** During all site excavation and grading, SBCTA will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. | 2-78 | IS with Proposed ND | San Bernardino County Transportation Authority Designated Contractor | During excavation and grading activities | | | | | | |
| **N-2** **Placement of Stationary Construction Equipment.** During construction, SBCTA will place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest to the Project limits. | 2-78 | IS with Proposed ND | San Bernardino County Transportation Authority Designated Contractor | During Construction | | | | | | |
| **N-3** **Equipment Staging Areas.** During construction, SBCTA will locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest to the Project limits. | 2-78 | IS with Proposed ND | San Bernardino County Transportation Authority Designated Contractor | During Construction | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Date / Initials | Date / Initials | YES | NO |
| **N-4** **Caltrans Standard Special Provision 14-8.02.** During construction, SBCTA will ensure all heavy construction activities that would potentially exceed 86 dBA $L_{max}$ at 50 feet will be conducted between 6:00 a.m. and 9:00 p.m. The Project will incorporate all applicable procedures and requirements detailed in the Caltrans SSP 14-8.02: Noise Control, as applicable. | 2-79 | IS with Proposed ND | San Bernardino County Transportation Authority Designated Contractor | During Construction | SSP | | | | | |
| **TRANSPORTATION** | | | | | | | | | | |
| **TR-1:** **Transportation Management Plan.** During Final Design, a TMP will be prepared for the Project. Key elements to be considered in the TMP include the following:<br>• Public Information<br>• Motorist Information Strategies<br>• Incident Management<br>• Construction Strategies<br>• Demand Management<br>• Alternative Route Strategies | 2-92 | IS with Proposed ND | San Bernardino County Transportation Authority Resident Engineer and Designated Contractor | During Plan, Specification, and Estimate Phase | | | | | | |

# APPENDIX C – LIST OF ACRONYMS

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## A

| | |
|---|---|
| AADT | annual average daily traffic |
| AAQS | ambient air quality standards |
| AB | Assembly Bill |
| AC | affected community |
| ACS | American Community Survey |
| ac | acre |
| ACMs | asbestos-containing materials |
| ADA | Americans with Disabilities Act |
| ADL | aerially deposited lead |
| ADT | average daily traffic |
| ACMs | asbestos-containing materials |
| amp | amplifier |
| APE | area of potential effects |
| ARB | California Air Resources Board |
| ASR | Archaeological Survey Report |
| AT&SF | Atchison, Topeka, and Santa Fe Railroad |

## B

| | |
|---|---|
| bgs | below ground surface |
| BMP | Best Management Practice |
| BSA | Biological Study Area |

## C

| | |
|---|---|
| CAA | Clean Air Act |
| Cal-IPC | California Invasive Plant Council |
| California Register | California Register of Historical Resources |
| Cal-OSHA | California Division of Occupational Safety and Health Administration |
| Caltrans | California Department of Transportation |
| CalRecycle | California Department of Resources Recycling and Recovery |
| Caltrans | California Department of Transportation |
| CCA | California Coastal Act |
| CCC | California Coastal Commission |
| CDFG | California Department of Fish and Game |
| CDFW | California Department of Fish and Wildlife |
| CEC | California Energy Commission |
| CEQ | Council on Environmental Quality |
| CEQA | California Environmental Quality Act |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability |

| | |
|---|---|
| | Act of 1980 |
| CERFA | Community Environmental Response Facilitation Act of 1992 |
| CESA | California Endangered Species Act |
| CFP | California Fully Protected |
| CFR | Code of Federal Regulations |
| CGS | California Geologic Survey |
| CHL | California Historic Landmarks |
| $CH_4$ | methane |
| CHP | California Highway Patrol |
| CHRIS | California Historical Resources Information System |
| CIA | Community Impact Assessment |
| CIDH | cast-in-drilled-hole |
| City | City of San Bernardino |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| $CO_2$ | carbon dioxide |
| County | County of San Bernardino |
| CPUC | California Public Utilities Commission |
| CRHR | California Register of Historical Resources |
| CSHM | California Seismic Hazard Map |
| CSUSB | California State University, San Bernardino |
| CWA | Clean Water Act |

**D**

| | |
|---|---|
| dBA | A-weighted decibel(s) |
| DDT | dichlorodiphenyltrichloroethane |
| DHS | Department of Health Services |
| DHHS | Department of Health and Human Services |
| DPP | Design Pollution Prevention |
| DPW | Department of Public Works |
| DSA | Disturbed Soil Area |

**E**

| | |
|---|---|
| EFH | Essential Fish Habitat |
| EJ | environmental justice |
| EIR | Environmental Impact Report |
| EMS | Emergency Medical Services |
| EO | Executive Order |
| ERB | Economic Recovery Bonds |
| ESA | Environmentally Sensitive Area |

## F

| | |
|---|---|
| °F | degrees Fahrenheit |
| FCAA | Federal Clean Air Act |
| FEMA | Federal Emergency Management Agency |
| FESA | Federal Endangered Species Act |
| FHWA | Federal Highway Administration |
| FIRM | Flood Insurance Rate Map |
| FONSI | Finding of No Significant Impact |
| FTA | Federal Transit Administration |
| FTIP | Federal Transportation Improvement Program |

## G

| | |
|---|---|
| g | acceleration due to gravity |
| GHG | greenhouse gas |
| GIS | geographic information system |

## H

| | |
|---|---|
| $H_2S$ | hydrogen sulfide |
| HCL | Historic-Cultural Monuments |
| HEI | Health Effects Institute |
| HDM | Caltrans' Highway Design Manual |
| HFC | hydrofluorocarbon |
| HFC-23 | fluoroform |
| HFC-134a | s, s, s, 2 –tetrafluoroethane |
| HFC-152a | difluoroethane |
| HMMP | Habitat Mitigation and Monitoring Plan |
| HPSR | Historical Property Survey Report |
| HRI | Historic Resources Inventory |
| HUD | United States Department of Housing and Urban Development |

## I

| | |
|---|---|
| I-215 | Interstate 215 |
| IHA | incidental harassment authorization |
| IPCC | Intergovernmental Panel on Climate Change |
| IRIS | Integrated Risk Information System |
| IS | Initial Study |
| ISA | Initial Site Assessment |

## J

| | |
|---|---|
| JD | Jurisdictional Delineation |

## K

| | |
|---|---|
| kV | kilovolt |

## L

| | |
|---|---|
| LACM | Natural History Museum of Los Angeles County |
| LBP | lead-based paint |
| LEDPA | least environmentally damaging practicable alternative |
| $L_{eq}$ | equivalent continuous noise level |
| $L_{eq}(h)$ | hourly equivalent continuous noise level |
| $L_{max}$ | maximum sound level |
| LOS | level of service |
| LT | Long-term measurement |
| LUST | leaking underground storage tank |

## M

| | |
|---|---|
| $\mu g/m^3$ | micrograms per cubic meter |
| $mg/m^3$ | milligrams per cubic meter |
| MBTA | Migratory Bird Treaty Act |
| Mmax | Maximum Moment Earthquake Magnitude (Mmax) |
| MCE | Maximum Credible Earthquake |
| MEP | Maximum Extent Practicable |
| mg/kg | milligrams per kilogram |
| MLD | Most Likely Descendant |
| MOT | maintenance of traffic |
| mph | miles per hour |
| MPG | miles per gallon |
| MPTA | Migratory Bird Treaty Act |
| MRZ | Mineral Resource Zone |
| MS4 | Municipal Separate Storm Sewer System |
| MSA | Magnuson-Stevens Fishery Conservation and Management Act |
| MSAT | Mobile Source Air Toxics |
| Mw | magnitude |
| mya | million years ago |

## N

| | |
|---|---|
| NAAQS | National Ambient Air Quality Standards |
| NAC | Noise Abatement Criteria |
| NAHC | Native American Heritage Commission |
| NATA | National Air Toxics Assessment |
| National Register | National Register of Historic Places |

| | |
|---|---|
| NB | Northbound |
| NEPA | National Environmental Policy Act |
| NES | Natural Environment Study |
| NESHAPS | National Emission Standards for Hazardous Air Pollutants |
| NHTSA | National Highway Traffic Safety Administration |
| NHPA | National Historic Preservation Act |
| NMFS | National Marine Fisheries Service |
| NO2 | nitrogen dioxide |
| NOx | nitrogen oxides |
| NOAA | National Oceanic and Atmospheric Administration |
| NOI | Notice of Intent |
| NOP | Notice of Preparation |
| NOT | Notice of Termination |
| NPDES | National Pollutant Discharge Elimination System |
| NRHP | National Register of Historic Places |
| NRC | National Response Center |
| NRC | Neighborhood Resource Center |
| NSR | Noise Study Report |

## O

| | |
|---|---|
| $O_3$ | ozone |
| OHWM | ordinary high water mark |
| OSHA | Occupational Safety and Health Administration |

## P

| | |
|---|---|
| PA | Programmatic Agreement |
| PAAL | Poly Academy of Achievers and Leaders |
| PA/ED | Project approval/environmental documentation |
| PAHs | polycyclic aromatic hydrocarbons |
| Pb | lead |
| PBDB | Paleobiology Database |
| PCBs | polychlorinated biphenyls |
| PDT | Project Development Team |
| PEAR | Preliminary Environmental Analysis Report |
| PFC | perfluorocarbon |
| PGA | peak ground acceleration |
| PM | particulate matter |
| PM | postmile |
| $PM_{10}$ | particulate matter less than ten microns in diameter |
| $PM_{2.5}$ | particulate matter less than 2.5 microns in diameter |

| | |
|---|---|
| PMP | Paleontological Mitigation Plan |
| PMR | Paleontological Mitigation Report |
| POAQC | Project of Air Quality Concern |
| Ppb | parts per billion |
| Ppm | parts per million |
| POAQC | project of air quality concern |
| PQS | Professionally Qualified Staff |
| PRC | Public Resources Code |
| Project | I-215/University Parkway Interchange Improvement Project |
| PS&E | Plans, Specifications, and Estimates |
| PSR | Project Study Report |

## R

| | |
|---|---|
| RCRA | Resource Conservation and Recovery Act of 1976 |
| ROW | right of way |
| RTP | Regional Transportation Plan |
| RV | recreation vehicle |
| RWQCB | Regional Water Quality Control Board |

## S

| | |
|---|---|
| SAN | Streambed Alteration Notification |
| SB | southbound |
| SBCTA | San Bernardino County Transportation Authority |
| SCAB | South Coast Air Basin/Basin |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCCIC | South Central Coastal Information Center |
| SCE | Southern California Edison |
| SDC | Seismic Design Criteria |
| sec | seconds |
| SEIR | Supplemental Environmental Impact Report |
| sf | square foot/feet |
| $SF_6$ | sulfurhexafluoride |
| SHPO | State Historic Preservation Officer |
| SIP | State Implementation Plan |
| SLF | Sacred Lands File |
| $SO_2$ | sulfur dioxide |
| SSP | Standard Special Provisions |
| SR | Short-term measurement |
| SVP | Society of Vertebrate Paleontology |

| | |
|---|---|
| SWDR | Storm Water Data Report |
| SWIS | Solid Waste Information System |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |

## T

| | |
|---|---|
| TCE | temporary construction easement |
| TIP | Transportation Improvement Program |
| TMDL | Total Maximum Daily Load |
| TMP | Traffic Management Plan |
| TNW | traditional navigable water |
| TOAR | Traffic Operational Analysis Report (December 2011) |
| TSCA | Toxic Substances Control Act |
| TSM | Transportation System Management |
| TSS | Total Suspended Solid |

## U

| | |
|---|---|
| µg/m3 | micrograms per cubic meter |
| UCMP | University of California Museum of Paleontology |
| Uniform Act | Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) |
| U.S. | United States |
| USA | Underground Service Alert |
| USACE | United States Army Corps of Engineers |
| USC | United States Code |
| U.S. EPA | United States Environmental Protection Agency |
| USDOT | United States Department of Transportation |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |
| UST | underground storage tank |

## V

| | |
|---|---|
| VAU | visual assessment unit |
| v/c | volume to capacity ratio |
| VHT | vehicle hours traveled |
| VIA | Visual Impact Assessment |
| VMT | vehicle miles traveled |
| VOC | volatile organic compounds |

## W

| | |
|---|---|
| WDID | Waste Discharger Identification |

| | |
|---|---|
| WDRs | Waste Discharge Requirements |
| WPCP | Water Pollution Control Plan |
| WQAR | Water Quality Assessment Report |

# APPENDIX D – GLOSSARY OF TECHNICAL TERMS

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| TERM | NOTE |
|---|---|
| **A** | |
| 100-year floodplain | The area within a floodplain that statistically has a 1% chance of flooding in any given year. |
| A-Weighted Decibel Sound Level (dBA) | The sound level measured on an instrument containing an A filter, which electronically simulates the frequency response of the human ear under an average intensity of sound. |
| Acquisition | The process of obtaining right-of-way. |
| Action | A National Environmental Policy Act (NEPA) term; construction or reconstruction, including associated activities of a transportation faciliiy. An action may be categorized as a "categorical exclusion" or a "major federal action." |
| Active Fault | A fault that has moved within late-Quaternary time (the last 750,000 years). Note that this definition is broader than that used by the California Department of Conservation, California Geological Survey (CGS), which defines an active fault as one that has moved within Holocene time (the last 11,000 years). |
| Adverse | A term used to describe unfavorable, harmful, or detrimental changes in environmental conditions. |
| Aerially deposited lead (ADL) | Lead deposited within unpaved areas or formerly unpaved areas, primarily due to vehicle emissions. Aerially deposited lead is typically found within the top 0.6 meters (2 feet) of material in unpaved areas within the highway right-of-way. |
| Air Contaminant | Any particulate matter, gas, or combination thereof, other than water vapor. |

| TERM | NOTE |
|---|---|
| Air Pollutant | Any substance in air that could, in a high enough concentration, harm humans, other animals, vegetation, or material. Pollutants may include almost any natural or artificial composition of airborne matter capable of being airborne. They may be in the form of solid particles, liquid droplets, gases, or in combination thereof. Generally, they fall into two main groups: (1) those emitted directly from identifiable sources, and (2) those produced in the air by interaction between two or more primary pollutants, or by reaction with normal atmospheric constituents, with or without photoactivation. Exclusive of pollen, fog, and dust, which are of natural origin, approximately 100 contaminants have been identified. Air pollutants are often grouped in categories for ease in classification; some of the categories are: solids, sulfur compounds, volatile organic chemicals, particulate matter, nitrogen compounds, oxygen compounds, halogen compounds, radioactive compound, and odors. |
| Air Quality Management District (AQMD) | A regional agency that adopts and enforces rules to achieve and maintain state and federal air quality standards. |
| Alluvium | Sediment deposited by flowing water, as in a riverbed, flood plain, or delta. |
| Alquist-Priolo Zones | Active fault zones, identified pursuant to the Alquist-Priolo Earthquake Fault Zone Act. This Act is intended to prevent the construction of new buildings for human occupancy over active faults. It requires identification of active fault zones and regulation of development within these zones. General Plan Safety Elements typically incorporate the Act's requirements. The Act does not apply to publicly owned facilities, critical facilities and lifelines, or industrial facilities. |

| TERM | NOTE |
|---|---|
| Alternatives | Solutions to the project's need. A "reasonable range" of alternatives must be considered as part of the Shoemaker Bridge Reconstruction Project Draft Initial Study/Environmental Assessment (IS/EA) process. One of those alternatives must be a "no project" or No Build Alternative. |
| Ambient Noise | The all-encompassing noise associated with a given environment, being usually a composite of sounds from many sources near and far. |
| Americans With Disabilities Act (ADA) | Federal civil rights legislation for disabled persons passed in 1990; calls on public transit systems to make their services more fully accessible as well as to underwrite a parallel network of paratransit service. |
| Annual Average Daily Traffic (AADT) | The average 24-hour volume, being the total number during a stated period divided by the number of days in that period. Unless otherwise stated, the period is a year. The term is commonly abbreviated as ADT or AADT. |
| ARB - California Air Resources Board | Part of the California Environmental Protection Agency, the California Air Resources Board is charged with promoting and protecting public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state. |
| Archaeological Survey Report (ASR) | Caltrans uses the Archaeological Survey Report (ASR) to present results of identification efforts conducted for a project. The ASR is an attachment to the Historic Property Survey Report (HPSR). |

| TERM | NOTE |
|---|---|
| Area of Potential Effect (APE) | A term used in Section 106 to describe the area in which historic resources may be affected by a federal undertaking. This term should only be used in cultural resource reports; "survey area" or "project footprint" should be used as applicable in other reports. |
| Arterial Street | A major thoroughfare, used primarily for through traffic rather than for access to adjacent land, that is characterized by high vehicular capacity and continuity of movement. |
| Asbestos | An incdmbustible mineral fiber used for fireproofing, electrical insulation, building materials, brake linings, and chemical filters. The fibers can pollute air or water and are a human health concern. |
| Attainment area | An area considered to have air quality as good as or better than the national ambient air quality standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a nonattainment area for others. |
| Attenuation | The reduction of noise. |
| Average Daily Traffic (ADT) | The average traffic volume of 24-hour counts collected over a number of days greater than one but less than a year |
| **B** | |
| Best Management Practices (BMP) | Methods or measures designed and selected to reduce or eliminate the discharge of pollutants from nonpoint source discharges. In water quality, BMPs include treatment requirements and operating procedures and practices to control site runoff, spills or leaks, sludge or waste disposal, or drainage from raw material storage. |
| Basin Plan | A specific plan for control of water quality within one of the nine hydrologic basins of the State under the regulation of a Water |

| TERM | NOTE |
|---|---|
| | Quality Control Board. |
| Biofiltration swales/strips | Biofiltration strips are vegetated land areas over which stormwater flows as sheet flow. Biofiltration swales are vegetated channels, typically configured as trapezoidal or v-shaped channels that receive and convey stormwater flows while meeting water quality criteria and other flow criteria. |
| Buildout | The maximum amount of building that can take place within a certain area, typically over a given period of time. |
| **C** | |
| California Department of Fish and Game (CDFG) | A public agency within the Resources Agency of the State of California. This agency is responsible for managing California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. CDFG also is responsible for the administration of the provisions of the State Endangered Species Act and for operating the California Natural Diversity Database. |
| California Department of Transportation (Caltrans) | Owner and operator of the SR-710, and Lead Agency under NEPA for the Shoemaker Bridge Replacement Project Draft Initial Study/Environmental Assessment (IS/EA). |
| California Environmental Quality Act (CEQA) | State legislation enacted in 1970 and subsequently amended. It protects the environment for the people of California through requiring public agencies and decision makers to consider and document the environmental consequences of actions. |
| CEQA Guidelines | Regulations adopted by the State of California to implement California Environmental Quality Act (CEQA). |
| California Native Plant Society (CNPS) | The California Native Plant Society is a statewide nonprofit organization dedicated to increasing understanding of California's native plants and to preserve them in their natural habitats through scientific activities, education, and conservation. The Society works primarily through its local chapters. |

| TERM | NOTE |
|---|---|
| California Natural Diversity Database (CNDDB) | The California Natural Diversity Database is part of the Wildlife and Habitat Data Analysis Branch, Habitat Conservation Division, California Department of Fish and Game. It is a statewide inventory of the locations and conditions of the state's rarest species and natural communities. Data in the CNDDB are stored in geographic information system (GIS) format and can be retrieved as reports, maps, or overlays. |
| California Public Utility Commission (CPUC) | Regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for ensuring that California utility customers have safe, reliable utility service at reasonable rates, protecting utility customers from fraud; and prom.oting the health of California's economy. |
| California Register of Historical Resources (California Register) | The California Register is the authoritative guide to the state's significant historical and archeological resources. |
| California Transportation Commission (CTC) | A State commission established by Assembly Bill 402 {AB 402) with nine appointed members and two ex-officio members, responsible for the programming and allocating of funds for the construction of highway, passenger rail, and transit improvements throughout California. The CTC also provides guidance and recommendations on transportation policies. |
| California Transportation Plan (CTP) | The state's long-range transportation plan, with a minimum 20-year forecast period, for all areas of the state that provides for the development and implementation of California's intermodal transportation system. (Title 23 United States Code, Section 135). Per California statute, the CTP may not be project-specific. |

| TERM | NOTE |
|---|---|
| Clean Air Act (CAA) | Federal legislation that sets national air quality standards; requires each state with areas that have not met federal air quality standards to prepare a State Implementation Plan (SIP). The sweeping 1990 amendments to the CAA, sometimes refereed to as CAAA, established new air quality requirements for the development of metropolitan transportation plans and programs. |
| Clean Air Act Amendments of 1990 (CAAA) | The comprehensive federal legislation that establishes criteria for attaining and maintaining the federal standards for allowable concentrations and exposure limits for various air pollutants; the act also provides emission standards for specific vehicles and fuels. |
| Clean Water Act | Legislation that provides statutory authority for the National Pollutant Discharge Elimination System (NPDES) program; Public law 92-500; 33 U.S.C. 1251 et seq. Also known as the Federal Water Pollution Control Act. |
| Community Noise Equivalent Level (CNEL) | The CNEL represents the average continuous noise level over a 24-hour period, with special weighting factors applied to noise events occurring in the nighttime (10:00 p.m. to 7:00a.m.). the evening (7:00p.m. to 10:00 p.m.), and the daytime (7:00a.m. to 7:00p.m.). |
| Conformity | The ongoing process that ensures the planning for highway and transit systems, as a whole and-over the long term. is consistent with the state air quality plans for attaining and maintaining health- based air quality standards; conformity is determined by metropolitan planning organizations (MPOs) and the U.S. Department of Transportation (U.S. DOT) and is based on whether transportation plans and programs meet the provisions of a State Implementation Plan (SIP). |
| Congestion | Defined by Caltrans as highway operating speeds reduced to less t.han 35 miles per hour for longer than 15 minutes. |

| TERM | NOTE |
|---|---|
| Cooperating Agency | An agency, other than the Lead Agency, that has jurisdiction by law or other expertise that is formally involved in a proposed project. |
| Criteria Pollutants | Criteria pollutants include ozone, carbon monoxide, nitrogen dioxide, inhalable particulates (particulate matter less than 10 microns), and lead, as defined by the California Air Resources Board. |
| cubic foot per second | A rate of flow equal to approximately 7.5 gallons. |
| Cumulative effects | Project effects that are related to other actions with individually insignificant but cumulatively significant impacts. |
| **E** | |
| Environmental Justice (EJ) | Federal Executive Order 12898 requiring analysis of the impact of a facility or project on disadvantaged populations (i.e., low-income, minority) |
| **F** | |
| Federal Highway Administration (FHWA) | Federal Highway Administration is the federal lead agency that has delegated its National Environmental Quality Act (NEPA) responsibility to Caltrans. |
| **G** | |
| Greenhouse Gas (GHG) | Green house gases can be naturally occurring or man-made. Greenhouse gases include, but are not limited to, the following gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafloride. |
| **I** | |
| Impacts | Reasonably predictable changes in the environment resulting from a proposed project. Impacts can be adverse or beneficial, and can be classified as direct, indirect, or cumulative. |
| Initial Study (IS) | An assessment of a proposed project's environmental impacts and recommended methods for avoiding or mitigating any significant adverse impacts. A Draft IS is circulated for public review and comment. A Final IS includes responses to public and agency comments and revisions to the Draft IS. |

| TERM | NOTE |
|---|---|
| **L** | |
| Lead Agency | The public agency responsible for completing California Environmental Quality Act!National Environmental Policy Act (CEQA/NEPA) documentation. For the Shoemaker Bridge Replacement Project, Caltrans is the Lead Agency. |
| **M** | |
| Mitigation Measure | Action that compensates for the significant impacts of a project. |
| Mitigation Monitoring and Reporting Program (MMRP) | A plan for ensuring that measures to mitigate adverse project impacts are implemented. The plan is a documentation of the commitments made by the Lead Agency to avoid, minimize, and mitigate project impacts and is used as a tool to track their implementation. For the Shoemaker Bridge Reconstruction Project Draft Initial Study/Environmental Assessment (IS/EA) a Mitigation Monitoring and Reporting Program (MMRP) has been provided in Appendix F. |
| **N** | |
| National Environmental Policy Act (NEPA) | Established in 1969, NEPA is the basic national charter for protecting the environment. NEPA requires federal projects to disclose potential environmental impacts and to evaluate alternatives and mitigations in the Shoemaker Bridge Replacement Project Draft Initial Study/Environmental Assessment (IS/EA). |
| Notice of Availability (NOA) | An announcement of the release of the Draft Initial Study/Environmental Assessment (IS/EA) Report/Environmental Impact Statement (EIRIEIS) that makes the documents available to the public. |
| Notice of Determination (NOD) | After approving the Final EIR, the Lead Agency files an NOD with the State Clearinghouse to document approval of the project. Posting of the NOD commences a 30-day statute of limitations. During this time, someone can file a court action challenging the approval of the project. |

| TERM | NOTE |
|---|---|
| **P** | |
| Purpose and Need Statement | The section of the Draft Initial Study (IS) dedicated to defining the problems to be solved (need) and what the project will accomplish (purpose). |
| **R** | |
| Record of Decision (ROD) | Public notification about which alternative the federal Lead Agency has selected and why. The ROD must be published no less than 30 days after the Notice of Availability (NOA) of the Environmental Document. |
| **S** | |
| Southern California Association of Governments (SCAG) | Southern California Association of Governments is a federally designated Metropolitan Planning Organization for the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura and is a Project partner agency. |
| State Clearinghouse Review | The Draft Initial Study (IS) is published in the State Clearinghouse Review for public review and comment. |
| **T** | |
| Technical Studies | A detailed study examining a specific environmental category (i.e., air quality, noise). |
| Trustee Agency | State agency that has jurisdiction, by law, over natural resources affected by a project (i.e. State lands Commission, California Department of Parks and Recreation). |

Sources: EPA Terms of Environment, Glossary, Abbreviations and Acronyms, www.epa.gov/OCEPAterms/aterms.html, accessed March 2010

# APPENDIX E – LIST OF TECHNICAL STUDIES

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The technical studies prepared to support the analysis and conclusions contained in this IS are listed below. These studies have been bound separately, and copies are available for public review from **July 12, 2019**, to **August 12, 2019**, at the following locations:

- California State University San Bernardino, John M. Pfau Library, located at 5500 University Parkway, San Bernardino, CA 92407 (Open Monday through Thursday 7 am to midnight, Friday 7 am to 5 pm, Saturday 9 am to 2 pm and Sunday 1 pm to 5 pm).

- SBCTA, 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA 92410-1715 (Available for review on weekdays from 8 am to 5 pm)

- Caltrans District 8 Office, located at 464 W 4th Street, San Bernardino, CA 92401 (Available for review on weekdays from 8 am to 4 pm). Please ask the guards at the security desk in the lobby to contact Antonia Toledo upon arrival.

- City of San Bernardino Department of Public Works, 300 N. “D” Street, San Bernardino, CA 92418 (Available for review Monday through Thursday 7:30 am to 5:30 pm and Friday 7:30 am to 4:30 pm)

*Air Quality Analysis Report.* Prepared by HDR Engineering, Inc. (September 2018)

*Archeological Survey Report.* Prepared by Applied Earthworks, Inc. (January 2019)

*Community Impact Assessment Memorandum.* Prepared by HDR Engineering, Inc. (January 2019)

*Historic Property Survey Report.* Prepared by Applied EarthWorks, Inc. (January 2019)

*Historical Resource Evaluation Report.* Prepared Applied Earthworks, Inc. (January 2019)

*Initial Site Assessment.* Prepared by HDR Engineering, Inc. (July 2018)

*Natural Environmental Study.* Prepared by HDR Engineering, Inc. (October 2018)

*Paleontological Impact Report/Paleontological Evaluation Report*. Prepared by Applied EarthWorks, Inc. (November 2018)

*Traffic Operational Analysis Report.* Prepared by HDR Engineering, Inc. (November 2018)

*Visual Impact Assessment.* Prepared by HDR Engineering, Inc. (January 2019)

*Water Quality Technical Memorandum.* Prepared by HDR Engineering, Inc. (August 2018)

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# APPENDIX F – REGIONAL TRANSPORTATION PLAN/FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM

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## Final 2019 Federal Transportation Improvement Program

San Bernardino County Project Listing
State Highway
(in $000`s)

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20150305 | San Bernardino | SCAB | | 713 | NCN46 | 215 | 4.1 | 10.1 | | | S | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 14,670 | | | Agency | VARIOUS AGENCIES | |

I-215 LANDSCAPING (SEGMENTS 1-3 & 5) IN THE CITY OF SAN BERNARDINO (Toll Credits: PNRS CON)

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECTS OF NATIONAL AND REGIONAL SIGNIFICANCE | | | 7,000 | 7,000 | 4,000 | 3,000 | | | | | | 7,000 |
| SBD CO MEASURE I | | | 7,670 | 7,670 | 5,670 | 2,000 | | | | | | 7,670 |
| 20150305 Total | | | 14,670 | 14,670 | 9,670 | 5,000 | | | | | | 14,670 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SBD59204 | San Bernardino | SCAB | | SBD59204 | NCRH3 | 215 | 11.35 | 11.95 | | | S | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 5,942 | | | Agency | SANBAG | |

I-215 AT UNIVERSITY PARKWAY INTERCHANGE - RECONSTRUCT INTERCHANGE (Divergent Diamond)(Toll Credits to match STP FY16/17 & FY18/19)

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SECTION 129 - SURFACE TRANSPORTATION PRIORITIES | 735 | | | 735 | 735 | | | | | | | 735 |
| STP LOCAL | 910 | | 3,314 | 4,224 | 910 | | 3,314 | | | | | 4,224 |
| DEVELOPER FEES | 13 | 125 | 17 | 155 | 13 | 125 | 17 | | | | | 155 |
| SBD CO MEASURE I | 70 | 665 | 93 | 828 | 70 | 665 | 93 | | | | | 828 |
| SBD59204 Total | 1,728 | 790 | 3,424 | 5,942 | 1,728 | 790 | 3,424 | | | | | 5,942 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20190008 | San Bernardino | SCAB | | 200614 | NCN46 | 215 | 21.4 | 5.1 | | | S | EXEMPT - 93.126 | 0 |
| Description: | | | | | | | PTC | 7,894 | | | Agency | SANBAG | |

I-215 Landscaping (Bi-County HOV Gap Closure): Non-capacity project to absorb only the landscape portion of project 200614.

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SBD CO MEASURE I | | | 7,894 | 7,894 | | | 7,894 | | | | | 7,894 |
| 20190008 Total | | | 7,894 | 7,894 | | | 7,894 | | | | | 7,894 |

| ProjectID | County | Air Basin | Model | RTP ID | Program | Route | Begin | End | Signage Begin | Signage End | System | Conformity Category | Amendment |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 200451 | San Bernardino | MDAB | | 4M0802 | CAX63 | 395 | 11.2 | 16.6 | | | S | NON-EXEMPT | 0 |
| Description: | | | | | | | PTC | 55,321 | | | Agency | VARIOUS AGENCIES | |

US-395 (HESPERIA, VICTORVILLE, & ADELANTO) FROM SR18 TO CHAMBERLAINE WAY -INTERIM WIDENING-WIDEN FROM 2-4 LANES AND ADD LEFT TURN CHANNELIZATION AT INTERSECTIONS(EA OF631)(Toll Credits: FY17/18 $2,217 for STP, TC to match EARREPU)(PPNO 0260J)

| Fund | ENG | R/W | CON | Total | Prior | 2018/2019 | 2019/2020 | 2020/2021 | 2021/2022 | 2022/2023 | 2023/2024 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEMO-SAFETEA-LU | | 360 | | 360 | 360 | | | | | | | 360 |
| 2016 EARMARK REPURPOSING | | | 2,558 | 2,558 | | 2,558 | | | | | | 2,558 |
| STP LOCAL | 6,482 | 5,950 | | 12,432 | 12,432 | | | | | | | 12,432 |
| AGENCY | | | 24,292 | 24,292 | | 24,292 | | | | | | 24,292 |
| LOCAL ADVANCE CONSTRUCTION | | | | | | | | | | | | |
| SBD CO MEASURE I | | 582 | | 582 | 582 | | | | | | | 582 |
| SHOPP - ADVANCE CONSTRUCTION | | | 214 | 214 | | 214 | | | | | | 214 |

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**TABLE 2** Financially-Constrained RTP/SCS Projects - Continued

| System | Lead Agency | RTP ID | Route # | Route Name | From | To | Description | Completion Year | Project Cost ($1,000's) |
|---|---|---|---|---|---|---|---|---|---|
| **County: San Bernardino** | | | | | | | | | |
| STATE HIGHWAY | SAN BERNARDINO ASSOCIATED GOVERNMENTS (SANBAG) | 4M01045 | 215 | I-215 | I-215 | CAMPUS PKWY | I-215 @ CAMPUS PKWY NEW INTERCHANGE | 2040 | $92,640 |
| STATE HIGHWAY | SAN BERNARDINO ASSOCIATED GOVERNMENTS (SANBAG) | 4M0803 | 215 | I-215 | SR-60 | I-10 | I-215 BI-COUNTY IMPROVEMENT PROJECT - ADD 1 MAINLINE LANE IN EACH DIRECTION FROM SR-60 TO I-10 | 2035 | $347,326 |
| STATE HIGHWAY | SAN BERNARDINO, CITY OF | SBD59204 | 215 | | | | I-215 AT UNIVERSITY PARKWAY INTERCHANGE - RECONSTRUCT INTERCHANGE | 2022 | $4,449 |
| STATE HIGHWAY | SANBAG | 200614 | 215 | | | | I-215 BI-COUNTY HOV LANE GAP CLOSURE PROJECT- ADD 1 HOV LANE IN EACH DIRECTION FROM SPRUCE ST. ON RIV 91 TO ORANGE SHOW RD;(ALSO INCLUDES RTP 4M0803 (STIP 2010 $24881 RCTC AND $45089 SANBAG)(M003) | 2015 | $187,249 |
| STATE HIGHWAY | SANBAG | 713-20150305 | 215 | | | | I-215 LANDSCAPING (SEGMENTS 1-3 & 5) IN THE CITY OF SAN BERNARDINO (TOLL CREDITS: PNRS CON) | 2020 | $14,670 |
| STATE HIGHWAY | VARIOUS AGENCIES | 713-713 | 215 | | | | I-215 CORRIDOR NORTH - IN SAN BERNARDINO, ON I-215 FROM RTE 10 TO RTE 210 - ADD 2 HOV & 2 MIXED FLOW LNS (1 IN EA. DIR.) AND OPERATIONAL IMP INCLUDING AUX LANES AND BRAIDED RAMP (M003) | 2015 | $724,444 |
| STATE HIGHWAY | VARIOUS AGENCIES | SBD31850 | 215 | | | | IN GRAND TERRACE @ I-215 BARTON RD I/C RECONSTRUCT OC & RAMPS W/ PARTIAL CLOVERLEAF CONFIG. NW OF I-215 WORK INCL ADD OF NB AUX LN.LOCAL ST WORK TO INCL WIDENING OF BARTON RD, REMOVAL OF LA CROSSE AVE. B/W VIVENDA AVE & BARTON RD, RPLCMT W/ NEW LOCAL RD, IMPRVMTS TO BARTON RD & MICHIGAN WAY/ VIVENDA AVE INTERSEC & REALIGNMT OF COMMERCE WY (TOLL CREDITS USED TO MATCH DEMO: ROW) | 2018 | $78,600 |
| STATE HIGHWAY | YUCCA VALLEY | 4A01386 | 247 | SR-247 (OLD WOMAN SPRINGS RD) | NORTH YUCCA VALLEY TOWN LIMITS | SR-62 | WIDEN SR-247 FROM NORTH YUCCA VALLEY TOWN LIMITS TO SR-62 FROM 2 TO 4 LANES (EA:34430) (PM | 2035 | $20,599 |

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# APPENDIX G – UNITED STATES FISH AND WILDLIFE SERVICE SPECIES LIST

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2018-SLI-0758
Event Code: 08ECAR00-2019-E-00948
Project Name: I-215 University Parkway IC

February 04, 2019

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

# Project Summary

Consultation Code: 08ECAR00-2018-SLI-0758

Event Code: 08ECAR00-2019-E-00948

Project Name: I-215 University Parkway IC

Project Type: TRANSPORTATION

Project Description: The proposed project is intended to provide operational improvements to traffic flow associated with the I-215/University Parkway Interchange Improvement Project (Project). SBCTA proposes to replace the existing University Parkway tight diamond interchange configuration with a Diverging Diamond Interchange (DDI) configuration. The existing undercrossing would remain in place. This concept would improve all four legs of the current interchange and would improve directional movement through the system. Using the DDI system, the interchange would allow more efficient left-turn and right-turn movements at all ramp terminals.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.164897106168425N117.33292945018263W


Counties: San Bernardino, CA

# Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

| NAME | STATUS |
|---|---|
| San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/2060 | Endangered |

## Birds

| NAME | STATUS |
|---|---|
| California Condor *Gymnogyps californianus*<br>Population: U.S.A. only, except where listed as an experimental population<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/8193 | Endangered |
| Coastal California Gnatcatcher *Polioptila californica californica*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/8178 | Threatened |
| Least Bell's Vireo *Vireo bellii pusillus*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/5945 | Endangered |
| Southwestern Willow Flycatcher *Empidonax traillii extimus*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/6749 | Endangered |

## Flowering Plants

| NAME | STATUS |
|---|---|
| Santa Ana River Woolly-star *Eriastrum densifolium ssp. sanctorum*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6575 | Endangered |
| Thread-leaved Brodiaea *Brodiaea filifolia*<br>There is **final** critical habitat for this species. Your location is outside the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/6087 | Threatened |

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

# APPENDIX H – MAPS

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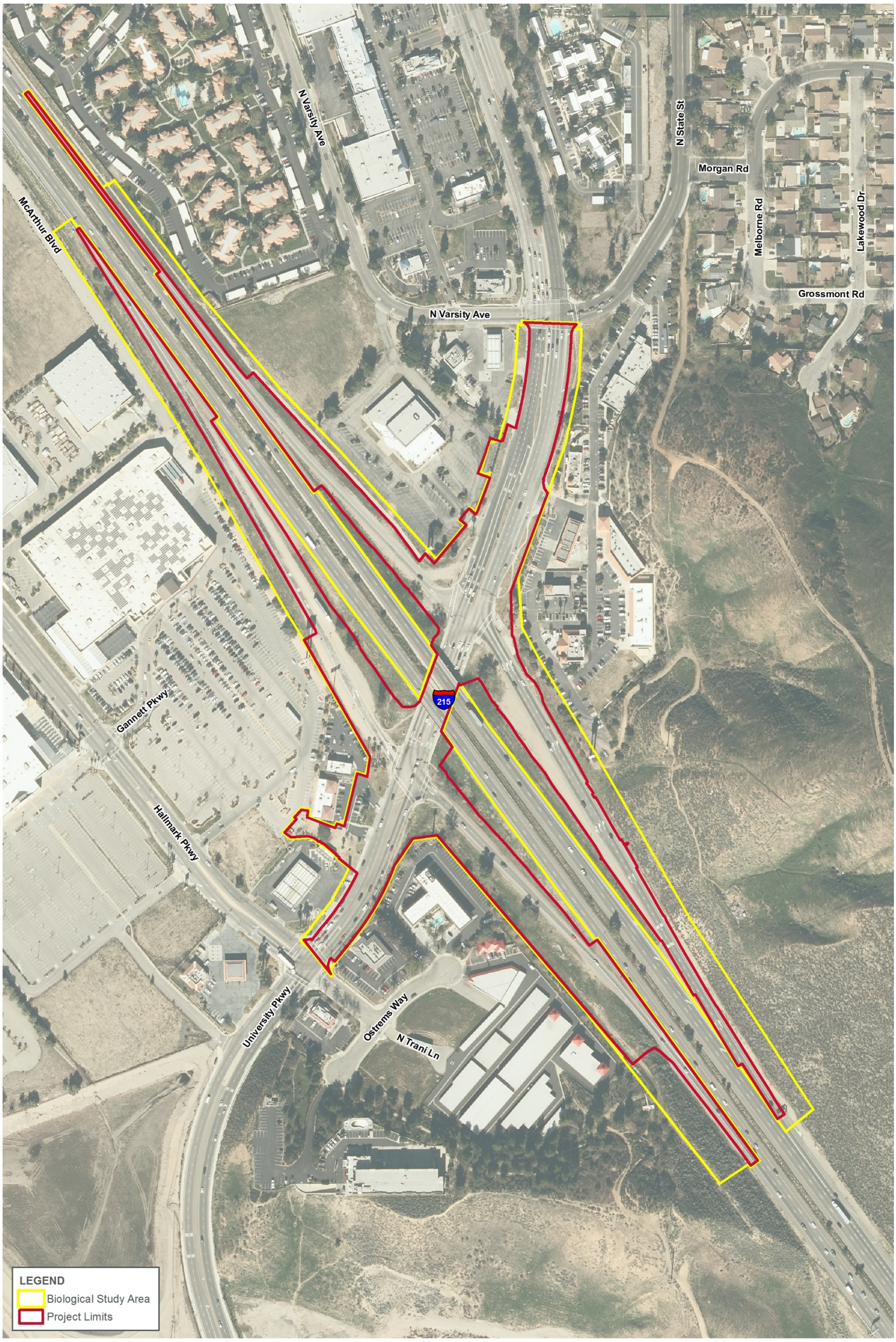


I-215: PM 11.35/11.95
EA No: 0E420

*I-215/University Parkway Interchange Improvement Project*

**Figure H-1. Biological Study Area**

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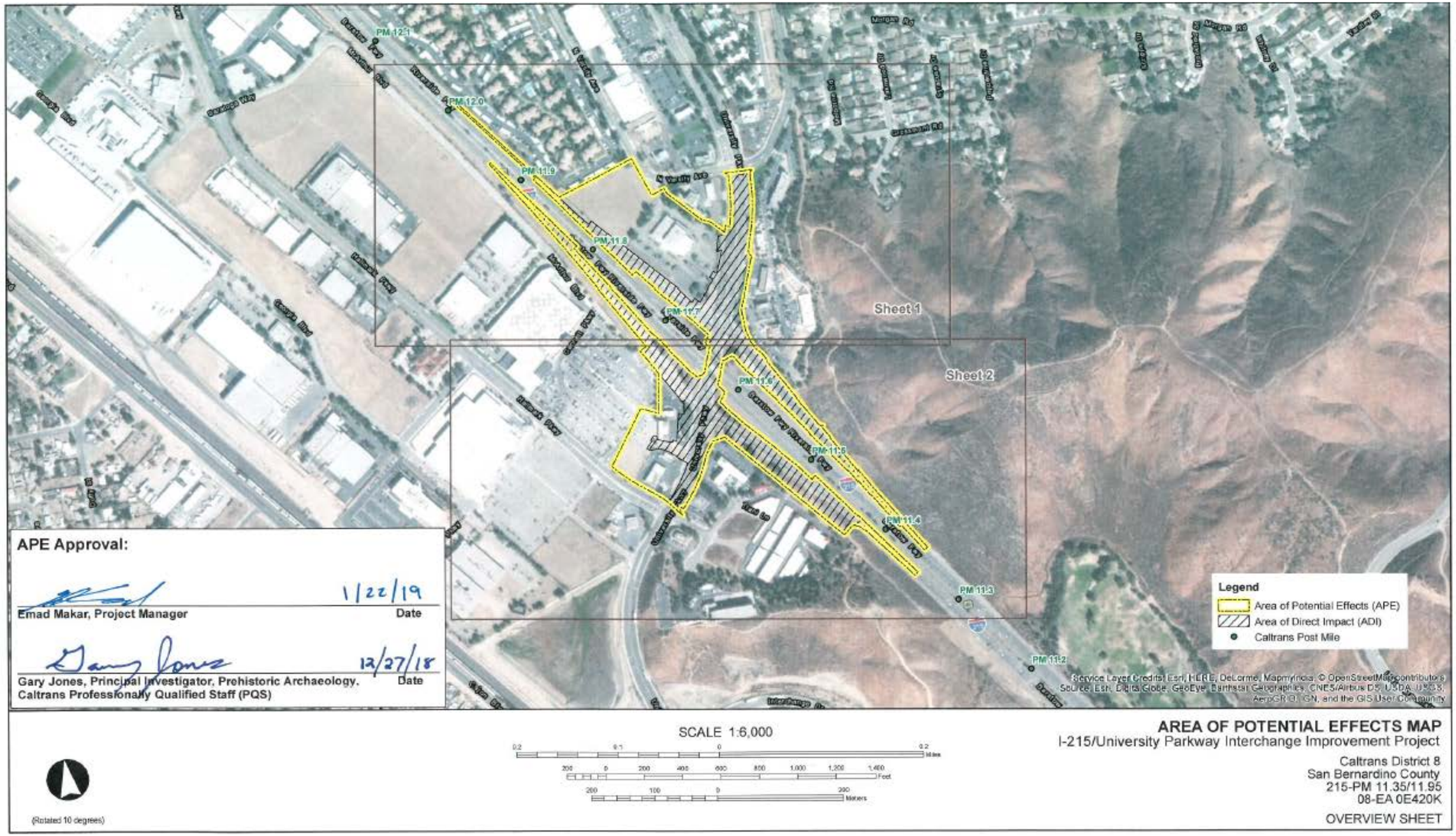


**Figure H-2. APE Map**
**Overview Sheet**

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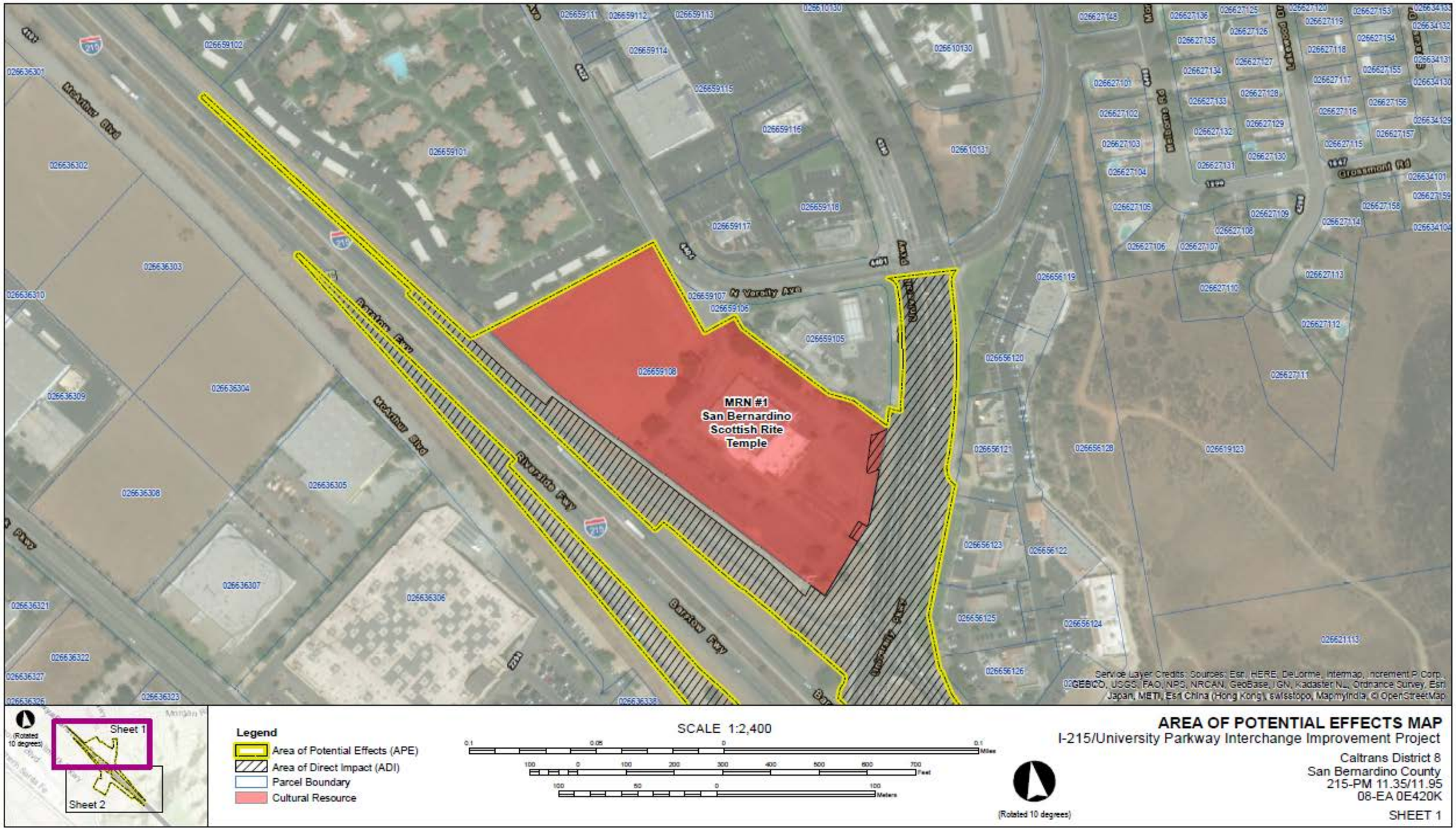


**Figure H-2. APE Map**
**Sheet 1 of 2**

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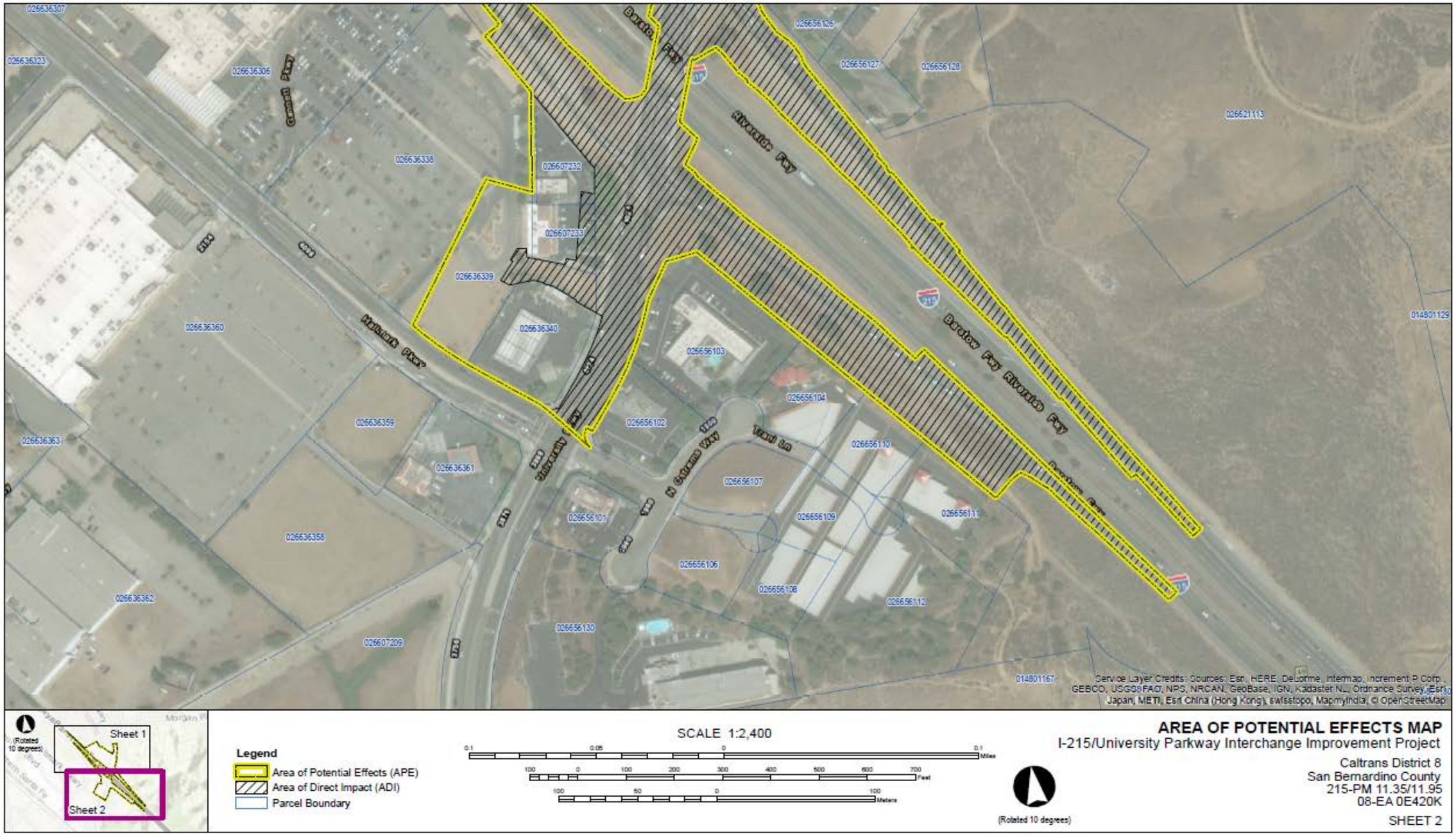


**Figure H-2. APE Map**
**Sheet 2 of 2**

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